

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF VIRGINIA  
RICHMOND DIVISION

THE TRUSTEES OF COLUMBIA  
UNIVERSITY IN THE CITY OF  
NEW YORK

v.

NORTONLIFELOCK INC.  
f/k/a SYMANTEC CORPORATION

Civil Action No.:  
3:13 CV 00808

April 21, 2022

**DAY 8**  
**EXPEDITED OVERNIGHT TRANSCRIPT**

COMPLETE TRANSCRIPT OF JURY TRIAL  
BEFORE THE HONORABLE M. HANNAH LAUCK  
UNITED STATES DISTRICT COURT JUDGE

APPEARANCES:

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(The proceeding commenced at 9:02 a.m.)

THE CLERK: Day eight. Case Number 3:13 CV 808.  
*Trustees of Columbia University in the City of New York v.*  
*NortonLifeLock Inc.*

Columbia is represented by Garrard Beeney,  
Dustin Guzior, Alex Gross, Jessica Ecker, John Erbach and  
Dana McDaniel.

Norton is represented by Douglas Lumish, Michael  
Morin, Benjamin Behrendt and Dabney Carr.

Are counsel ready to proceed?

MR. BEENEY: Plaintiff is ready. Thank you.

MR. LUMISH: Norton is ready, Your Honor.

THE COURT: All right.

Do you-all want to place anything on the record  
about my opinion?

MR. MORIN: May I approach, Your Honor?

THE COURT: Okay.

MR. MORIN: I'm not going to reargue anything,  
Your Honor. Just we have to state for the record we  
disagree, and we would object to the reading of the  
curative instruction and the relief that Your Honor has  
ordered. But I say that for the record, Your Honor.

THE COURT: Okay. All right.

MR. BEENEY: Two things, briefly, if I may, Your  
Honor.

1 First of all, mindful that the jury may not  
2 necessarily be deeply steeped in examinations and  
3 cross-examinations and redirect examinations, I would like  
4 to ask Your Honor -- I don't think that we, that is  
5 Columbia, should bear the risk of there being any  
6 confusion here, so I wonder if reading from Page 9 of Your  
7 Honor's opinion, 1155, whether the Court would consider  
8 making three additions.

9 And that is in the first sentence that reads,  
10 "To the extent that the cross-examination" and instead  
11 make it to the extent that "Norton's" cross-examination.

12 On Line 4 there's a reference "to Dr. Cole near  
13 the end of the testimony and those written on  
14 demonstratives by counsel," add the word "Norton's" before  
15 counsel.

16 And then, finally, in the last line, "does not  
17 pertain to testimony by Dr. Cole during," add the words  
18 "Columbia's direct and redirect examination."

19 So those would be our three suggestions just to  
20 avoid any chance that the jury is confused by the use of  
21 cross, and counsel, and redirect, and those concepts.

22 THE COURT: All right.

23 I'm going to confirm that you are suggesting  
24 that the first line read to the extent that Norton's  
25 "cross-examination of Dr. Cole on Tuesday suggested," and

1 then toward the end of that sentence, "the testimony and  
2 those written on demonstratives by" Norton's counsel?

3 MR. BEENEY: Yes, Your Honor.

4 THE COURT: "The evidence and testimony  
5 discussed," did you not want to repeat Norton's there?

6 MR. BEENEY: No. I think that's fine to leave  
7 that one out.

8 THE COURT: And then the last sentence, "This  
9 instruction does not pertain to testimony by Dr. Cole  
10 during" Columbia's "direct or re-direct examination."

11 MR. BEENEY: If Your Honor, please, yes.

12 THE COURT: Understanding that Norton,  
13 obviously, objects to that. I don't see that that's -- I  
14 think it helps the jury understood.

15 MR. MORIN: Just for the clarity of the record,  
16 while Norton objects to the curative instruction, and  
17 maintains that objection, we have no objection if the  
18 curative instruction is being given over our objection to  
19 the changes that are proposed by counsel.

20 And beyond that, the only thing, just to make  
21 sure we have a clean record, we may submit later on just  
22 for the record a copy of the demonstratives that Dr. Cole  
23 used on direct just so they're in the record, if that's  
24 okay with Your Honor?

25 THE COURT: All right. Sure. Of course.

1 MR. MORIN: Thank you, Your Honor.

2 THE COURT: Yes.

3 MR. BEENEY: And, Your Honor, if I may, just one  
4 other brief issue?

5 Mr. McDaniel reminded me last night that on  
6 April 7 we had argument on Mr. Hosfield and what he could  
7 say and what he couldn't say. And on Pages 117 through  
8 124 of the transcript, I made some comments, counsel for  
9 Norton made some comments, and the Court made some  
10 comments. And I think the fair reading of that was that  
11 Norton would not be putting numbers in the record for  
12 damages.

13 And again, Mr. Lumish stated, "I just want to be  
14 able to say to the jury we didn't infringe so we don't owe  
15 them anything. We didn't fraudulently conceal anything"  
16 --

17 THE COURT: Now you're talking too fast. And if  
18 you can say -- because I'm not looking at what you're  
19 looking at, what are you looking at?

20 MR. BEENEY: I'm sorry, Your Honor. It's  
21 Page 124 of the April 7 transcript at 10 through --

22 THE COURT: Of what transcript?

23 MR. BEENEY: April 7.

24 THE COURT: Okay.

25 MR. BEENEY: I'm sorry.

1 "I just want to be able to say to the jury we  
2 didn't infringe so we don't owe them anything. We didn't  
3 fraudulently conceal anything, so we don't owe them  
4 anything.

5 I think we should be allowed to say that there's  
6 no liability and no damages at all in the case. And  
7 that's, I think, what we're trying to protect here."

8 And I agree that's perfectly appropriate. But I  
9 just want to make sure going forward that we have the  
10 understanding that we're not going to do what we did the  
11 day before yesterday, which is throw out numbers which I  
12 think clearly cross the line of what the Court said, what  
13 I understood and what counsel actually represented both to  
14 Columbia and the Court during this hearing on April 7.

15 THE COURT: All right.

16 MR. MORIN: Your Honor, we respectfully  
17 disagree, for the record. It was always our  
18 understanding, and we never would have said that we have  
19 to accept their numbers, that we could challenge them. My  
20 understanding is that we couldn't do that during  
21 cross-examination.

22 But I'm just stating that for the record.

23 THE COURT: All right. Well, I'm going to order  
24 going forward because of how the testimony unveiled on  
25 Tuesday, and because of my ruling and because earlier

1 commentary that if it is that you plan to roll out actual  
2 numbers, that you give notice to Columbia, but in advance.

3 MR. MORIN: Your Honor, if on cross-examination  
4 I want to challenge the other side's numbers and say that  
5 the number would actually be lower if you applied this  
6 approach, I'm not allowed to say that?

7 MR. BEENEY: I think, Your Honor, it was  
8 clearly -- you know, just to some -- just for some  
9 context, we were arguing both of the question of  
10 Dr. Dossier, and then we moved into the question of  
11 Dr. Hosfield. And I presented an argument, and Ms. Tull  
12 responded by basically saying that Norton agreed with the  
13 argument that Mr. Hosfield would not be providing a  
14 number.

15 And then we went on to have a discussion about  
16 whether there could be a quantification. And the clear  
17 import of 118 to 124 of the April 7 transcript was that  
18 there will not be a number. We spoke in some detail about  
19 quantification.

20 I'm just trying to find the best quote.

21 THE COURT: Well, how about this: For now  
22 you're not doing cross-examination on Dr. Cole anymore,  
23 and then we're having some deposition, is that correct?

24 MR. BEENEY: We're actually, because of  
25 scheduling issues for Dr. Sullivan, going to move directly

1 into Dr. Sullivan and then do the depositions afterwards.

2 THE COURT: Well, I will want to look at that  
3 transcript, and I want to allow you-all to respond to it,  
4 so I guess we can take at least a break after the redirect  
5 and allow folks to approach it.

6 MR. MORIN: May I approach, Your Honor?

7 MR. BEENEY: I'm sorry.

8 If I could say one other thing?

9 I suppose it is legitimate that if Dr. Sullivan  
10 will adopt a concept that counsel is proposing that it's  
11 legitimate to then go through the mathematical exercise.  
12 But without the witness adopting the predicate, doing the  
13 math in front of the jury is just not evidence of anything  
14 except for the fact of the principles of math.

15 So I don't think it's appropriate, even without  
16 these representations, to propose a theory to a witness  
17 that the witness rejects, and then say without there being  
18 any predicate in the record, because we know Mr. Hosfield  
19 is not going to tie it up, that therefore let's do the  
20 math without anything other than it being counsel's theory  
21 as to how the damages should be calculated.

22 So, again, if Dr. Sullivan adopts the predicate  
23 for the number, I think that's probably fair. But I don't  
24 think without there being any predicate other than  
25 counsel's suggestions as to how the reasonable royalty

1 damages should be done, to ask a witness to do the math or  
2 for counsel to tell the jury what the result of the math  
3 is.

4 THE COURT: Okay.

5 MR. MORIN: May I approach, Your Honor?

6 THE COURT: Sure.

7 MR. MORIN: Very briefly, Your Honor.

8 I believe that that discussion was all about  
9 Dr. Hosfield, and you had thrown out on *Daubert* part of  
10 his opinion, which goes to the opinions that he had  
11 offered.

12 I believe, for the sake of the record, that the  
13 cross-examination is appropriate, but I have the following  
14 proposal to try to help Your Honor deal with the  
15 situation.

16 Why don't we proceed forward. It's not going to  
17 affect Dr. Sullivan's direct examination. And I propose  
18 we get through that. It will probably be a convenient  
19 time, hopefully, for a break, and we'll excuse  
20 Dr. Sullivan so he won't hear my next cross-examination  
21 and I can give Your Honor exactly where I intend to go  
22 without him in the room. We can -- I can get my calls  
23 from you there.

24 I think I will be able to explain what I intend  
25 to do very -- hopefully effectually, and you can tell me

1 in a very short time what I can and can't do, and it will  
2 almost serve as an offer of proof so that no one is  
3 surprised about what's happening.

4           So, again, his direct goes, he's excused, and  
5 before I begin my cross, and so that he won't hear my  
6 cross, I basically preview anything having to do with  
7 numbers to Your Honor.

8           THE COURT: All right. Well, I'm going to tell  
9 you that what Mr. Beeney just said is my ruling.

10           You cannot do what you did on Tuesday, which is  
11 to say, okay, I know you don't take my numbers, but if my  
12 numbers did apply, here's the math.

13           And the witness continually says I'm not taking  
14 your predicate. I'm not taking your predicate.

15           And you keep saying you relied on this. You  
16 relied on this.

17           And the witness says, no, no, no.

18           Those are only your numbers when that occurs,  
19 and it is entirely inappropriate. Really, if you get to  
20 one and the witness doesn't adopt it, much less going on  
21 to others, necessarily, if you are trying to do what you  
22 did, which is give an alternate apportionment theory,  
23 which I maybe would or would not say that, but that's what  
24 that graph is. And if the witness rejects it, you cannot  
25 say, okay, I understand you disagree, and move on. You

1 have to stop asking that question.

2           And I am going to tell you do not switch up what  
3 the witness says. If the witness says I don't rely on  
4 it -- I understand that in cross-examination you may ask  
5 that once or twice, but you may not continue to do it for  
6 10 or 15 minutes. You just -- you have to do what the  
7 witness responds to, and if there's an objection you have  
8 to apply -- you have to comply.

9           And I'm happy to hear objections early on so it  
10 doesn't continue.

11           MR. MORIN: Your Honor, we had a day to -- to  
12 reflect. Your Honor, I understand that. I understand  
13 your ruling on that, so what I am going to propose that we  
14 do is I'm not going to have him calculate an alternative  
15 number like we did on Dr. Cole on --

16           THE COURT: You can't.

17           MR. MORIN: That's what I'm saying. I  
18 understand Your Honor's ruling, is what I'm saying.

19           THE COURT: Okay.

20           MR. MORIN: And what I'm asking is that I think  
21 is an appropriate approach, and I would be surprised if  
22 any friends disagree, that before we go with Dr. Sullivan  
23 we take 10 minutes to avoid any misunderstandings, and I  
24 preview my cross-examination effectively because he'll be  
25 out of the room and not know what's -- you know, he won't

1 be previewing it, but you and opposing counsel will, and  
2 then you can call the -- tell me what I can do and I will  
3 stay within there.

4 I suspect my cross will now be quite short. And  
5 I suspect that it will also serve, and save us time later,  
6 as an offer of proof, basically, on the record.

7 THE COURT: I have no problem with that. I just  
8 wanted to be clear that what Mr. Beeney was placing on the  
9 record I think is exactly what I just ruled. And so as  
10 you're preparing your cross, I would want you to be sure  
11 that I understand his statement to be correct.

12 MR. MORIN: I understand. And so that's why I'm  
13 going to preview it, and the wrath will be on me,  
14 obviously, if I haven't done a good enough job. I will  
15 preview his cross to you and opposing counsel, and we'll  
16 get there.

17 THE COURT: Well, it won't be wrath. It will  
18 just be excluded.

19 MR. MORIN: Okay. I understand.

20 And, Your Honor, we have lodged our objections  
21 on the record. I don't think it's productive to have  
22 further argument about them, but we disagree for the  
23 record on the decision.

24 I do want to say one point of reflection. While  
25 I disagree with that decision, on reflection I should have

1 asked the Court's permission. I was only -- the ring tone  
2 was a default example. I was trying to relate something  
3 to the jury. But I'm saying with candor and with  
4 humbleness on this point, I should have asked your  
5 permission and not brought out the phone, so I apologize  
6 for that.

7 THE COURT: Well, I'm pretty sure that you know  
8 the Eastern District. There is no way that permission  
9 would have been granted, and I'm pretty sure you know  
10 that. So that's fine. We're done with that. Phones are  
11 gone, and we're fine.

12 MR. MORIN: Right. And that's the -- I've  
13 lodged objections to other things. I wanted to make sure  
14 you knew, Your Honor, that, I wanted to say it on the  
15 record, I should have asked permission and guidance which  
16 I understand would have denied on that. I've brought an  
17 old-fashioned calculator to the extent we do any math  
18 today.

19 THE COURT: You're not doing it with witnesses.

20 MR. MORIN: Okay. Thank you, Your Honor.

21 THE COURT: All right.

22 So I plan just to instruct the jury before  
23 Dr. Cole is placed back on the stand. That's the process.  
24 And when we begin, I will tell them that Dr. Cole is  
25 coming in for redirect.

1 I know you object to the substance, but I want  
2 to know if there is an objection to the procedure?

3 MR. BEENEY: Thank you, Your Honor. That's  
4 good. That's fine with us. Thank you.

5 MR. LUMISH: And with Norton, Your Honor.

6 THE COURT: Right. Just to procedure. I  
7 understand that.

8 All right. Let's bring them in.

9 (Jury is present in the courtroom.)

10 THE COURT: All right. Good morning.

11 JURORS: Good morning.

12 THE COURT: We missed you yesterday. We were  
13 doing hard work, and did not want to keep you at bay any  
14 longer than we needed to. But I hope you understand that  
15 that's part of the process going forward smoothly.

16 We're going to have Dr. Cole come to testify on  
17 redirect, which means that Columbia's counsel will be  
18 asking him questions. But first I want to issue an  
19 instruction that I would like you-all to listen to, all  
20 right?

21 To the extent that Norton's cross-examination of  
22 Dr. Cole on Tuesday suggested that any kind of  
23 apportionment number had been identified during  
24 cross-examination, including the number suggested to  
25 Dr. Cole near the end of the testimony, and those written

REDIRECT EXAMINATION OF DR. COLE BY MR. GUZIOR 1684

on demonstratives by Norton's counsel, they are stricken.

And I instruct you to disregard them in their entirety.

The evidence and testimony discussed during cross-examination included reliance on inadmissible and inapplicable evidence that cannot be used to assess apportionment and damages.

Any notes taken about that evidence shall be disregarded as well.

This instruction does not pertain to the testimony that Dr. Cole gave during Columbia's direct examination, and the redirect examination that will occur today.

Is anybody confused by that? Just raise your hand if you are.

All right. I don't see any hands.

We'll go forward with redirect.

MR. GUZIOR: May I approach, Your Honor?

THE COURT: Please do.

**REDIRECT EXAMINATION**

BY MR. GUZIOR:

Q Good morning, Dr. Cole.

A Good morning.

Q Let's start with Slide 85 from your direct presentation that you gave the other day.

REDIRECT EXAMINATION OF DR. COLE BY MR. GUZIOR 1685

1 Norton's lawyer asked you several questions  
2 about your 2014 expert report and your 2019 expert report.  
3 Do you remember that?

4 A Yes, I do.

5 Q With reference to the slide, I want to start with  
6 your 35 percent number that is shown in the blue box. Do  
7 you see that?

8 A Yes, I do.

9 Q Can you remind the jury what that 35 percent number  
10 represents?

11 A That 35 percent is Columbia's patents, the value that  
12 that adds to the SONAR component of Norton's products.

13 Q And I want to take a look at your 2014 expert report,  
14 please. And, Dr. Cole, what you see on the screen, is  
15 this the cover of your 2014 expert report?

16 A Yes, it is.

17 Q Let's take a look at the top of Page 87 of your 2014  
18 report. Do you see the table at the top of the page?

19 A Yes, I do.

20 Q Do you see the column with the header '115 family?

21 A Yes, I do.

22 Q Does that refer to the '115 and '322 patents at issue  
23 in this trial?

24 A Yes, it does.

25 Q Now, what percentage of the value of SONAR/BASH did

REDIRECT EXAMINATION OF DR. COLE BY MR. GUZIOR 1686

1 you assign to the '115 and '322 patents in 2014?

2 A Thirty-five percent.

3 Q Did you increase that percentage even one decimal  
4 point in your 2019 report?

5 A No, I did not. It's still 35 percent.

6 Q Let's go back to Slide 85 from your presentation. I  
7 now want to look at the 24 percent number in the purple  
8 box. Can you remind us what that 24 percent number  
9 represents?

10 A That's the percent value that SONAR adds to malware  
11 detection within Norton's products.

12 Q Got it.

13 Now let's keep that 24 percent number in mind.  
14 And I want to go back to your 2014 report at Page 57. And  
15 do you see the table in the middle of the page?

16 A Yes, I do.

17 Q Does this table show the percentage value that you  
18 assign to SONAR/BASH as part of malware detection  
19 functionality?

20 A Yes, it does.

21 Q What percentage did you assign to SONAR/BASH in 2014?

22 A The overall share was 30 percent, but the specific  
23 amount for SONAR/BASH was 24 percent.

24 Q Did you increase that percentage even one decimal  
25 point in your 2019 report?

REDIRECT EXAMINATION OF DR. COLE BY MR. GUZIOR 1687

1 A No, I did not. It's still 24 percent.

2 Q In fact, when you take into account all of the  
3 accused product sales, did your average percentage  
4 decrease in 2019?

5 A Yes, it did.

6 Q Why?

7 A Because there was more product sales, there was more  
8 contribution. So normally what you would do is as sales  
9 value, and you have additional data and information shows  
10 the increased demand, you would normally increase the  
11 percent. But in this case, I kept the percentage the  
12 same.

13 Q Let's go back to Slide 85. To summarize, Dr. Cole,  
14 as between your 2014 report and 2019 report, did you  
15 increase either the 35 percent number or the 24 percent  
16 number?

17 A No, I did not.

18 Q If Norton's counsel was trying to suggest to the jury  
19 that those apportionment percentages changed, would that  
20 be true?

21 A No, it would not.

22 Q Now I want to talk about your first apportionment  
23 percentages in red on Slide 85. Did those numbers change  
24 between your 2014 and 2019 reports?

25 A Yes, it did.

REDIRECT EXAMINATION OF DR. COLE BY MR. GUZIOR 1688

1 Q Between 2014 and 2019, was a lot of new evidence  
2 produced in this case?

3 A Yes, there was.

4 Q Were there several new depositions?

5 A Yes, there were.

6 Q Were there several new documents produced?

7 A Yes, there were.

8 Q Were there several new data productions?

9 A Yes, there were.

10 Q Did you review that new evidence before you wrote  
11 your 2019 report?

12 A Yes, I did.

13 Q And did you take all of that evidence into account  
14 when you estimated your 2019 percentages for malware  
15 detection functionality?

16 A Yes, I did.

17 Q The other day you tried to explain to Norton's lawyer  
18 that the assignment you were given by lawyers in 2014 was  
19 different from the assignment you were given in 2019.

20 Have you served as an expert witness in a litigation  
21 before this one?

22 A Yes, I have many times.

23 Q In your experience, is it common for the lawyers to  
24 give instructions and assumptions that an expert witness  
25 is required to follow?

REDIRECT EXAMINATION OF DR. COLE BY MR. GUZIOR 1689

1 A Yes, it's very common that I'm given a specific scope  
2 and a specific task that I'm asked to perform.

3 Q Were you given instructions and assumptions to follow  
4 in 2014 for your apportionment opinions in this case?

5 A Yes, I was.

6 Q Also in 2019?

7 A That is also correct.

8 Q Were those instructions the same?

9 A No, they were not.

10 Q What was the main difference?

11 A The main difference was in 2014, the tasks and  
12 instructions I was given was to use 70 percent as the  
13 upper limit for a consumer, and 60 percent for the upper  
14 limit for enterprise.

15 In 2019, I was asked to not apply any limits and  
16 take a complete view using the product and price  
17 differential analysis and come up with numbers for malware  
18 detection.

19 Q Norton's lawyer spent more than an hour on Tuesday  
20 talking about Mr. Nachenberg's 70 percent number for  
21 malware detection functionality. But even if one were to  
22 focus on that issue, Dr. Cole, is there a big difference  
23 between the effective or applied average of your first  
24 apportionment number in 2019 and Mr. Nachenberg's 70  
25 percent number?

REDIRECT EXAMINATION OF DR. COLE BY MR. GUZIOR 1690

1 A No. The applied average in 2019 is 74 percent, and  
2 that's within 4 percent of Mr. Nachenberg's number.

3 Q Now to summarize, Dr. Cole, with reference to  
4 Slide 85, as between your 2014 and 2019 reports, was there  
5 any difference in your 35 percent number in blue?

6 A No, there was not.

7 Q Your 24 percent number in purple?

8 A No, there was not.

9 Q And was there a substantial difference in your  
10 malware detection numbers in red?

11 A There were some changes in those numbers. I wouldn't  
12 necessarily say they were substantial.

13 Q If Norton's lawyer was trying to suggest that I asked  
14 you to increase these numbers so that Columbia's damages  
15 would be larger, would there be any truth to that  
16 suggestion?

17 A There would be no truth to that suggestion. And I  
18 would not have followed such an instruction because my  
19 reputation in these cases is very important.

20 Q Now I want to focus on your 24 percent number in  
21 purple momentarily, and I now want to show you a document  
22 that we looked at on Tuesday, PX511, on Slide 40 of your  
23 presentation. Was this an ordinary course email sent  
24 outside the context of this litigation?

25 A I apologize. I'm not sure of the question.

REDIRECT EXAMINATION OF DR. COLE BY MR. GUZIOR 1691

1 Q Let me do a better job, Dr. Cole.

2 What is PX511?

3 A This is an email from Adam Bromwich that was sent in  
4 2014 talking about the block counts, and how SONAR and  
5 insight contribute to the overall product.

6 Q Now, we've talked about the 90 percent number that  
7 Mr. Bromwich mentions for insight and SONAR on Tuesday.  
8 Can you remind the jury what that 90 percent number means?

9 A That 90 percent is referring to the advanced real  
10 world unknown threats that are happening and occur on the  
11 system. What Mr. Bromwich is referring to is you have all  
12 of these attacks, but a large amount of it is what we call  
13 in the security profession, noise on the wire, which are  
14 just basic simple attacks.

15 These are attacks that freeware, and almost all  
16 commoditized products, would catch. So what really  
17 matters to the customers, and what Mr. Bromwich is  
18 highlighting, is the really critical advanced polymorphic  
19 threats, that 90 percent of those are caught by insight  
20 and SONAR.

21 Q Now, Mr. Bromwich's email showed that Norton believed  
22 SONAR was even more valuable than your 24 percent number?

23 A Yes, he did. Because if you are using this number  
24 from Adam Bromwich, then you would assign 45 percent to  
25 insight and 45 percent to SONAR.

REDIRECT EXAMINATION OF DR. COLE BY MR. GUZIOR 1692

1 Q I see.

2 Now, Dr. Cole, I have just three points I want  
3 to touch on briefly.

4 MR. GUZIOR: And if it's possible, could we  
5 switch over to the ELMO, please.

6 THE CLERK: I think you're going to have to push  
7 the power button in the top corner.

8 MR. GUZIOR: That would help. Thank you.

9 THE CLERK: Give it just a minute.

10 THE COURT: Are you marking that for  
11 demonstrative purposes?

12 MR. GUZIOR: In a moment I will, Your Honor.

13 THE COURT: All right.

14 BY MR. GUZIOR:

15 Q Dr. Cole, do you recall this demonstrative that  
16 Norton's counsel showed to you on Tuesday?

17 A Yes, I do.

18 Q Now, do you remember on Tuesday that we talked about  
19 something called freeware?

20 A Yes, I do.

21 Q Can you remind us what freeware is?

22 A Freeware is software that is free. And what happens  
23 in many industries, including cybersecurity, is when you  
24 have features that become commoditized, like signature or  
25 firewall, you start seeing free products come out on the

REDIRECT EXAMINATION OF DR. COLE BY MR. GUZIOR 1693

1 market that provide those base commoditized services that  
2 consumers can use at no cost.

3 Q And in the 2008 to 2010 period, was freeware driving  
4 down the price of antivirus software?

5 A Yes, it was.

6 Q Now I want to draw a line on this chart, Dr. Cole,  
7 and then ask you if you agree with it.

8 Well, let me first ask you this, Dr. Cole: I  
9 notice something strange about this chart. In grade  
10 school do you remember you would sometimes draw a chart,  
11 and if you went down the Y axis, the last number would be  
12 zero, right?

13 A That is correct.

14 Q Now, Norton's counsel's chart goes down only to 30,  
15 right?

16 A That is correct.

17 Q Now I want to draw a line on this chart and ask you  
18 some questions about it. Now, Dr. Cole, do you see that  
19 I've added zero to the Y axis of this chart?

20 A Yes, I do.

21 Q And do you see that I've added a downward trending  
22 red line moving to zero?

23 A Yes, I do.

24 Q In light of freeware, if Norton had not introduced  
25 new technology at the end of 2009, would the price of

REDIRECT EXAMINATION OF DR. COLE BY MR. GUZIOR 1694

1 Norton's products have been driven down to zero?

2 A Yes, they would have, in my professional opinion.

3 Q And was that confirmed by the deposition testimony of  
4 Norton's, Mr. Wall, that we looked at on Tuesday?

5 A Yes, it was.

6 Q I see.

7 Now, Dr. Cole, --

8 MR. GUZIOR: And, Your Honor, I'm going to mark  
9 this for identification only as a demonstrative as PX1000.

10 THE COURT: It will be marked as a  
11 demonstrative, PX1000. The top of it was "Accused  
12 Functionality Added"?

13 MR. GUZIOR: That's correct, Your Honor.

14 THE COURT: All right.

15 (Columbia's Demonstrative Exhibit PX1000 is  
16 marked.)

17 BY MR. GUZIOR:

18 Q Next, Dr. Cole, I'm going to show you another  
19 demonstrative that Norton's counsel used on Tuesday. Do  
20 you remember this graphic that was showed to you on  
21 Tuesday?

22 A Yes, I do.

23 Q First, do you believe that it is fair and accurate to  
24 depict the malware protection box in blue as being the  
25 same size as free support 24/7, for example?

REDIRECT EXAMINATION OF DR. COLE BY MR. GUZIOR 1695

1 A No, I do not.

2 Q If you were talking about an airplane flight to go on  
3 vacation, would it make sense to depict the value of the  
4 airplane as being equal to the value of the free hand  
5 sanitizer?

6 A No, it would not.

7 Q Is that effectively what Norton's counsel was trying  
8 to depict in this chart on the screen?

9 A Yes, they were.

10 Q In your opinion, Dr. Cole, should the malware  
11 protection box be significantly larger than the box for  
12 these other features?

13 A Yes, it should.

14 Q Now to be clear, Dr. Cole, did you in fact assign  
15 value, some value, to these other features in the yellow  
16 boxes?

17 A Yes, I did. I did account for those features, and  
18 assign some value and the reason why the malware  
19 protection is at 90 percent.

20 Q Did you believe that malware protection was  
21 significantly more valuable than those other features?

22 A Yes, I do.

23 Q Now let's return back to Slide 85 from your Tuesday  
24 presentation, please. Does this slide show your final  
25 apportionment percentages on the right-hand side of the

1 slide?

2 A Yes, it does.

3 Q Is that 6.3 percent for the enterprise products, and  
4 5 to 8 percent for the consumer products?

5 A That is correct.

6 Q To be crystal-clear, for the enterprise product, is  
7 Columbia seeking any royalty for 93.6 percent of the  
8 product?

9 A No, they are not.

10 Q For Norton consumer, is Columbia seeking any royalty  
11 for 92 to 95 percent of the product?

12 A No, they are not.

13 Q In your professional opinion, Dr. Cole, are  
14 Columbia's apportionment percentages that you've provided,  
15 modest and entirely reasonable?

16 A Yes, they are.

17 Q Thank you for your time, Dr. Cole.

18 A Thank you.

19 THE COURT: May this witness be excused?

20 MR. GUZIOR: Yes, Your Honor, for Columbia.

21 MR. MORIN: Yes, Your Honor, for Norton.

22 THE COURT: All right.

23 Dr. Cole, thank you so much for your time. You  
24 are excused, and we appreciate your testimony.

25 DR. COLE: Thank you, Your Honor.

REDIRECT EXAMINATION OF DR. COLE BY MR. GUZIOR 1697

1 Thank you, jury.

2 THE COURT: You're welcome.

3 **WITNESS STOOD ASIDE**

4 THE COURT: All right. Are you prepared to call  
5 the next witness?

6 MR. BEENEY: Yes, Your Honor. The last witness  
7 that Columbia will be calling to the stand is  
8 Dr. Ryan Sullivan, who'll be testifying about a reasonable  
9 royalty and damages with respect to fraudulent  
10 concealment.

11 THE COURT: All right. Thank you.

12 THE CLERK: You do solemnly swear that the  
13 testimony you are about to give in this case, before this  
14 Court, shall be the truth, the whole truth and nothing but  
15 the truth, so help you God?

16 DR. SULLIVAN: I do.

17 THE CLERK: Thank you.

18 THE COURT: So, Dr. Sullivan, I'm going to  
19 welcome you. And I'm probably going to give you a  
20 precursor of my biggest job during this entire trial,  
21 which is to remind people to speak slowly and into the  
22 microphone because certainly it helps our court reporter  
23 get it correctly, and we definitely want the jury to hear  
24 what you're saying, okay?

25 DR. SULLIVAN: Very good. I will do my very

DIRECT EXAMINATION OF DR. SULLIVAN BY MR. BEENEY 1698

1 best.

2 THE COURT: Okay. Thank you.

3 MR. BEENEY: If I may, Your Honor?

4 THE COURT: Please.

5 MR. BEENEY: Thank you.

6 Whereupon, **Dr. Ryan M. Sullivan**, having been  
7 duly sworn in, testifies as follows:

8 **DIRECT EXAMINATION**

9 BY MR. BEENEY:

10 Q Good morning, Dr. Sullivan.

11 A Good morning.

12 Q Would you please tell us your full name and where do  
13 you work?

14 A Ryan Michael Sullivan. R-Y-A-N, M-I-C-H-A-E-L,  
15 S-U-L-L-I-V-A-N.

16 I work at a company known as Intensity. I work  
17 as an economist, and I serve as president of Intensity.

18 Q And, Dr. Sullivan, why are you here today?

19 A I am here to explain and describe the work I did in  
20 calculating damages for Columbia due to the infringement  
21 of the '115 patent, the '322 patent, as well as to address  
22 the allegations of fraudulent concealment, and the damages  
23 incurred by Columbia as a result.

24 Q And just so we're clear, Dr. Sullivan, were you asked  
25 to provide or achieve any specific result?

DIRECT EXAMINATION OF DR. SULLIVAN BY MR. BEENEY 1699

1 A No. I was asked for my independent expert opinion.

2 Q And did you prepare a set of slides to help you  
3 present your testimony to the jury today?

4 A Yes, I did.

5 Q And we can just pull that up. And, Dr. Sullivan, do  
6 you recognize this?

7 A Yes, I do. This is the cover page of the  
8 demonstratives that I prepared.

9 Q And let's turn to the first substantive page, the  
10 next page on the slides, and just tell us a little bit  
11 about your background, Dr. Sullivan, please.

12 THE COURT: I'll going to interrupt you,  
13 Mr. Beeney. Did we get a copy of this report?

14 MR. BEENEY: The Court should have had them on  
15 Tuesday, at the latest.

16 THE COURT: All right.

17 MR. BEENEY: I'm sorry.

18 THE COURT: No, that's okay. We skipped a day  
19 and we're out of whack.

20 MR. BEENEY: I don't even remember what today  
21 is, Your Honor.

22 THE COURT: Thank you.

23 All right. Now we're ready. My apologies.

24 MR. BEENEY: I'm sorry. That was certainly our  
25 fault.

DIRECT EXAMINATION OF DR. SULLIVAN BY MR. BEENEY 1700

1 THE COURT: I'm sure it's in our chambers.

2 MR. BEENEY: But Your Honor does have the  
3 exhibits?

4 THE COURT: I do. I have those. And both sides  
5 have been very good about getting me what I need. It  
6 doesn't mean that I keep up with it, unfortunately.

7 MR. BEENEY: One versus many.

8 BY MR. BEENEY:

9 Q So, Dr. Sullivan, back to your slide deck. Just tell  
10 us a little bit about your background, if you will.

11 A I have been providing professional economic services  
12 since 1992. So it has been just over 30 years now. I  
13 began my career and my academics at U.C. San Diego -  
14 that's University of California in San Diego - performing  
15 mathematical economic research. And since that time, have  
16 worked with different economics and data science  
17 companies.

18 Q And why did you choose University of California, San  
19 Diego, to do your work?

20 A U.C. San Diego is world renowned for its research and  
21 its faculty in mathematical economists. It gave me an  
22 opportunity to work with some of the top mathematical  
23 economists in the world, including the two economists that  
24 I have worked with directly that earned the Nobel Prize in  
25 economic research.

DIRECT EXAMINATION OF DR. SULLIVAN BY MR. BEENEY 1701

1 Q Dr. Sullivan, as an economist just give us a couple  
2 of examples of the kind of work that you do.

3 A I do a wide variety of different types of projects.  
4 There are three that I have found to be very interesting  
5 for me.

6 One was working with the National Basketball  
7 Association, the NBA, and the NBA player's association.  
8 So back in 2016, there was a negotiation over the  
9 collective bargaining agreement between the NBA on the one  
10 hand, and the player's association on the other, in terms  
11 of the contract, the compensation, and the like. I worked  
12 with the player's association as the lead economist  
13 negotiating that collective bargaining agreement between  
14 those two entities.

15 A second example, also in professional sports,  
16 was working with the Boston Red Sox. And therein, we  
17 developed pricing, and pricing algorithms, for ticket  
18 prices at the Boston Red Sox games. And the notion was to  
19 evolve and adjust those prices to be able to get more fans  
20 into the stadium.

21 A third example that I really enjoyed involved a  
22 movie a while back called Joy. And this was a movie, some  
23 of you may have seen, with Jennifer Lawrence and Bradley  
24 Cooper and Robert De Niro. And it was illustrating the  
25 rags to riches story of Joy Mangano who was selling the

DIRECT EXAMINATION OF DR. SULLIVAN BY MR. BEENEY 1702

1 Miracle Mop on Home Shopping Network.

2           So I was working with Joy, and her company, and  
3 HSN, Home Shopping Network, to evolve the sales of her  
4 products from Home Shopping Network into brick and mortar.  
5 Into Target, into Bed, Bath & Beyond.

6           And what I did was develop with them the  
7 business strategy of how to make that transition. How to  
8 do the launch, what products to put where, how to price  
9 them, and how to get the greatest value from the publicity  
10 that was occurring from the movie that was being launched  
11 at the same time.

12 Q     Dr. Sullivan, you're doing your work today with  
13 respect to patents and intellectual property, so maybe we  
14 can turn to your next slide that you prepared, and tell us  
15 a little bit about your work in the intellectual property  
16 area?

17 A     I have maintained a focus on intellectual property  
18 for many years. My work has involved patent valuations  
19 for licensing and for sales, sales of individual patents  
20 as well as portfolios. I have been involved in many  
21 different patent licensing negotiations in some senses  
22 similar to the work that I did with the NBA player's  
23 association, albeit with technology.

24           And I have also served as an expert in cases  
25 such as this in evaluating damages associated with patent

DIRECT EXAMINATION OF DR. SULLIVAN BY MR. BEENEY 1703

1 infringement.

2 Q You mentioned here real world patent licensing  
3 negotiations. Is it common for you to sit, as it were,  
4 face-to-face across the table from someone and actually  
5 negotiate a license?

6 A It does occur from time to time. More frequently  
7 negotiations occur over phone, email, and zoom. Yet I  
8 have also had a number of occasions to sit at the  
9 proverbial negotiating table working with the opposite  
10 side to be able to get to a constructive deal that works  
11 for all parties.

12 Q And is your experience in actually negotiating  
13 licenses helpful for the task that you are performing in  
14 this case today?

15 A I believe it is. It provides the context and the  
16 understanding of how it is that parties ultimately reach  
17 an agreement, and what that agreement is in substance.

18 Q So in addition to your work with license  
19 negotiations, and determining what the value of a patent  
20 license would be on both sides, we've had some testimony  
21 about work related to product pricing and how that impacts  
22 ultimately a reasonable royalty analysis. Would you just  
23 tell us a little bit about your work with respect to  
24 product pricing?

25 A I have done a lot of work with product pricing. The

DIRECT EXAMINATION OF DR. SULLIVAN BY MR. BEENEY 1704

1 Home Shopping Network is one example. The Boston Red Sox  
2 another.

3 A third example in that would be work that I did  
4 with a company called Wine.com. And they are an online  
5 wine retailer. And we built the pricing algorithms and  
6 the formulas to adjust each and every bottle of wine that  
7 is sold each and every day based upon the demand in a  
8 given geography, what is occurring in brick and mortar  
9 stores around that geography, as well as what is going on  
10 with other online wine retailers.

11 And the key issue there is that the demand for  
12 each bottle can really vary depending upon what the  
13 customer base is for each individual product.

14 Q And, Dr. Sullivan, we're obviously asking you for  
15 your opinion today in litigation. This is where we are.  
16 But how much of your work is related to litigation, and  
17 how much of it is related to actual business negotiations,  
18 licensing negotiations, and the like?

19 A Approximately half of my professional work is related  
20 to litigation.

21 Q And if you take that half that's related to  
22 litigation, obviously today you are working or providing  
23 an opinion that -- for Columbia, how much of the work that  
24 you do is for a plaintiff and how much of the work that  
25 you do is for a defendant?

DIRECT EXAMINATION OF DR. SULLIVAN BY MR. BEENEY 1705

1 A It is split almost perfectly evenly about 50/50  
2 between plaintiffs and defendants.

3 Q And today you're going to be offering your opinion  
4 about the reasonable royalty in patents that are related  
5 to computer security. Have you ever addressed the value  
6 of patents in computer security before?

7 A Yes, I have. I have done so actually on behalf of  
8 accused infringers or defendants in patent infringement  
9 litigation.

10 Q And have you been qualified by courts before as an  
11 expert on the question of reasonable royalty in economic  
12 damages?

13 A Yes, I have.

14 MR. BEENEY: Your Honor, at this point, Columbia  
15 will offer Dr. Sullivan as an expert in economics, and the  
16 calculation of damages and reasonable royalty for patent  
17 infringement, and damages for fraudulent concealment.

18 THE COURT: All right.

19 Is there any objection?

20 MR. MORIN: No objection, Your Honor.

21 THE COURT: All right.

22 He will be qualified as an expert in the areas  
23 you just identified.

24 MR. BEENEY: Thank you, Your Honor.

25 BY MR. BEENEY:

DIRECT EXAMINATION OF DR. SULLIVAN BY MR. BEENEY 1706

1 Q Dr. Sullivan, let me go on to the next slide that you  
2 prepared to explain to the jury what really you were asked  
3 to do in this case.

4 A I had two primary tasks. The first is to calculate  
5 the damages incurred by Columbia as a result of the  
6 alleged infringement of the '322 patent and the '115  
7 patent by Symantec and Norton.

8 The second task was to calculate the damages  
9 incurred by Columbia as a result of the allegations of  
10 fraudulent concealment against Symantec and Norton.

11 Q And to perform the tasks of calculating the damages,  
12 did you look at the evidence in this case?

13 A Yes, I did. I reviewed a very large amount of  
14 information.

15 Q And going over to your Slide 5, maybe you can just  
16 give us a little bit of high-level description of the  
17 materials and the evidence that you considered to provide  
18 the jury with your opinion.

19 A You know, naturally, I reviewed the patents at issue  
20 in this case. There was also a large amount of financial  
21 data that has been produced by Symantec and Norton.  
22 Reviewed their company documents.

23 I perform my own research into the marketplace  
24 for data and information on competitor's products and  
25 demand for the products at issue and competing products.

DIRECT EXAMINATION OF DR. SULLIVAN BY MR. BEENEY 1707

1 I also reviewed witness testimony. I  
2 interviewed witnesses, I reviewed expert reports, amongst  
3 other documents.

4 Q And moving over to your Slide 6, Dr. Sullivan, tell  
5 us what you did to actually reach your opinion.

6 A Well, I reviewed information, I performed research,  
7 conducted my analysis, and developed my independent  
8 opinions and conclusions. I set that forth in two reports  
9 that were submitted in 2019.

10 These reports included 188 pages of text, nearly  
11 900 footnotes supporting the information and opinions that  
12 I set forth. This includes deposition testimony,  
13 documents, expert reports. It included approximately 900  
14 pages of analysis, tables and charts.

15 I sat for a deposition, and provided deposition  
16 testimony. And I also updated my calculations earlier  
17 this year with additional data that had been produced in  
18 this litigation.

19 And the purpose behind all of this is to provide  
20 full clarity and transparency over the work that I  
21 performed so that the Court and Norton can review and  
22 evaluate the work that I performed.

23 Q So, Dr. Sullivan, let's then move on to the first  
24 part of the case. Were you asked to calculate a  
25 reasonable royalty should the jury find that Norton

DIRECT EXAMINATION OF DR. SULLIVAN BY MR. BEENEY 1708

1 infringes the Columbia patents asserted in this case?

2 A Yes.

3 Q And let's move on to your Slide 7, and tell us what  
4 you understand a reasonable royalty to be and how that  
5 informed your task.

6 A My understanding, and the statute here states, that  
7 damages shall be in no event less than a reasonable  
8 royalty for the use made of the invention by the  
9 infringer.

10 And there's two primary takeaways here. The  
11 first is that a reasonable royalty is the minimum amount  
12 of damages, because damages should be no less than that.

13 And second, that the reasonable royalty should  
14 reflect the use made of the invention by the infringer.  
15 That means the extent of use, and the amount of use, of  
16 that technology in this case by Symantec and Norton.

17 Q And, Dr. Sullivan, is there a -- kind of a high-level  
18 construct or framework that you look at to try to follow  
19 what's on Slide 7 here?

20 A Yes, there is.

21 Q Let's take a look at your Slide 8, perhaps.

22 A As you have heard before, the construct or the  
23 framework that is being used in this case is known as a  
24 hypothetical negotiation. This is the most common and  
25 typical framework for determining a reasonable royalty in

DIRECT EXAMINATION OF DR. SULLIVAN BY MR. BEENEY 1709

1 patent infringement cases.

2           Here this is a negotiation that would have  
3 occurred back in time when the patents issued between  
4 Columbia on the one hand as the patent holder, and  
5 Symantec as, what's called, the licensee, the company that  
6 would be seeking rights to be able to utilize the  
7 technology.

8           This negotiation would have occurred in  
9 December 2011 for the '115 patent, because that is when  
10 the patent issued. And similarly, it would have occurred  
11 in December 2013 for the '322 patent, as that is when that  
12 patent issued.

13 Q       And just so we're clear, Dr. Sullivan, you're not  
14 going to be explaining to the jury a negotiation that  
15 actually occurred between Columbia and Symantec, is that  
16 true?

17 A       That's right. It is hypothetical. Had the  
18 negotiation actually occurred and had the parties actually  
19 come to agreement, we likely would not be sitting here  
20 today. Yet that negotiation did not occur, and thus we  
21 have to recreate it, if you will, to be able to calculate  
22 what the royalty would have been.

23 Q       And do you understand that in infringement cases,  
24 like the case that we're in today, that you are required  
25 to use your experience, expertise, and the facts of the

DIRECT EXAMINATION OF DR. SULLIVAN BY MR. BEENEY 1710

1 case to explain how you think that negotiation would have  
2 occurred?

3 A Yes. That's right. There are differences between a  
4 hypothetical negotiation and a real-world negotiation, yet  
5 this hypothetical negotiation is still based upon actual  
6 facts, actual data and information.

7 Q Now we've seen evidence that back in 2005 when  
8 Columbia filed a provisional application, PX4, on the  
9 patents-in-suit, that Columbia and Norton engaged in some  
10 limited negotiation for a license at that time in 2005.

11 Are you permitted to go back to 2005?

12 You gave us the dates of 2011 and 2013 here on  
13 the slide, but do you understand whether you are permitted  
14 to go back to the provisional application given the fact  
15 that we're actually in a litigation now?

16 A So my understanding is as a legal matter, damages do  
17 not start until the patent issues. So even though in the  
18 real world companies often will license a patent  
19 application before the patent issues, here, given the  
20 framework of a reasonable royalty and a hypothetical  
21 negotiation, we are instructed that that begins upon  
22 patent issuance. So here that's 2011 and 2013.

23 Q And just to make clear to the jury, Dr. Sullivan,  
24 that that it is their task to determine whether there is  
25 infringement or not, you're not providing an opinion that

DIRECT EXAMINATION OF DR. SULLIVAN BY MR. BEENEY 1711

1 there is infringement?

2 A That is correct. As an economist, it is not my role  
3 to evaluate or determine whether there is infringement.

4 Interestingly, at this hypothetical negotiation  
5 there is an assumption, a belief, by the parties that the  
6 patent is infringed.

7 Q So just to interrupt you, Dr. Sullivan, let's move on  
8 to your Slide 9 and perhaps we can talk about the  
9 assumptions that you're required to make.

10 THE COURT: While you're moving on, we just need  
11 to do a quick switch, if you don't mind, with our court  
12 reporters. We're not going to take a recess. And they do  
13 this super fast.

14 (The trial resumes on the next page.)  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

Ryan Sullivan - Direct

1712

1 THE COURT: That was fast. Thank you so much.  
2 I apologize for the interruption.

3 MR. BEENEY: Not at all. I certainly agree with  
4 Your Honor's sentiments. Thank you. The transcripts have  
5 been amazing.

6 BY MR. BEENEY:

7 Q So, Dr. Sullivan, I think you were about to explain  
8 to the jury what you are required to do in approaching  
9 your view of what would happen at the hypothetical  
10 negotiation.

11 A Sure. So two primary assumptions. One is that the  
12 patents are invalid, and second, that the patents are  
13 infringed. And this is a distinction over a real world  
14 negotiation where often these items are disputed by the  
15 parties. And so that is one key difference between the  
16 hypothetical negotiation and the real world.

17 Q And here, in this case, we have a direction from the  
18 Court about patent validity with respect to the '115 and  
19 the '322?

20 A Correct. So the validity of those two patents is not  
21 at issue in this trial. Although there is dispute over  
22 the infringement, there is not over the validity of those  
23 patents.

24 And in addition, what's unique about a  
25 hypothetical negotiation is that it's a situation where

Ryan Sullivan - Direct

1713

1 all of the information is available to both parties. So  
2 rather than a real world negotiation where one party might  
3 want to hold back the information that they have, this is  
4 much more like playing a card game with all the cards up  
5 on the table where both parties can see all of the  
6 information that's available that might be relevant.

7 Q And is it your understanding that that's what you're  
8 required to assume in doing your analysis?

9 A Correct.

10 THE COURT: Mr. Beeney, I think you may have  
11 stepped back a little bit from the microphone. So I'm  
12 going to be sure -- can you all hear everything?

13 BY MR. BEENEY:

14 Q So ultimately, Dr. Sullivan -- let's move to your  
15 slide 10, please.

16 Would you explain to us how you go about at a  
17 high level -- and we'll get into more detail so the jury  
18 understands, but at a high level, how do you calculate a  
19 reasonable royalty?

20 A The basic formula that applies in this case is shown  
21 on this page. It is the base, or sales base, which is  
22 dollars, multiplied by a rate, which is a percentage rate,  
23 and that gives the royalty. By way of simple  
24 illustration, if there were \$100 worth of sales and if the  
25 rate were 5 percent, performing that multiplication would

Ryan Sullivan - Direct

1714

1 provide a royalty of \$5.

2 And what is a common example that is often  
3 thought of is a book royalty, an author who owns rights on  
4 their book. That gets sold, and they might earn, say,  
5 5 percent of all of the sales, and it's that general idea  
6 that is applicable here.

7 Q So maybe we'll, as they say, cut to the chase and ask  
8 Mr. Chase to put up slide 43 and then we'll come back to  
9 how you got there, but would you tell the jury what your  
10 ultimate opinion is?

11 A In my view, based upon all of the research and  
12 analysis that I have performed, I determined that the  
13 appropriate revenue base or sales base is depicted here in  
14 the yellow box, and that is \$18,511,272,696. I multiply  
15 that by a royalty rate of 1.23 percent, and performing  
16 that calculation provides a royalty amount of  
17 \$227,169,402. And this, in my view, is the appropriate  
18 reasonable royalty for the '322 and '115 patents.

19 Q So without doing the precise math, if I understand  
20 this, when Norton sells \$18 and a half billion of products  
21 with the accused functionality that is accused to infringe  
22 the '115 and the '322, Norton gets to keep, out of that  
23 \$18 and a half billion, something like \$18,250,000,000?

24 A Roughly speaking, that's correct.

25 Q And there's been some focus by Norton on the blue box

Ryan Sullivan - Direct

1715

1 as being a big number, and it certainly is, but in terms  
2 of a reasonable royalty, do you believe that you can look  
3 at the blue box in isolation from the other two numbers on  
4 this slide?

5 A No. It is, indeed, a very substantial amount, yet as  
6 I'll show you in context and in the relevant information  
7 and the extent of the infringement as has been alleged, in  
8 my view, this is very reasonable.

9 Q All right. So let us now go back and basically tell  
10 the jury how you got to that number. And turning over to  
11 your slide 11, can you explain at a high level what this  
12 is, please?

13 A Yeah. So these are the various tasks that I  
14 undertook in calculating the reasonable royalty. On the  
15 left, you'll see a yellow box here for royalty base.  
16 That's the sales base that I was referring to earlier. I  
17 evaluated the geographic scope, which looks at where the  
18 customers are located in terms of the sales and whether it  
19 should be isolated to a particular geography or if it  
20 should include the entire world, and I will demonstrate to  
21 you that a worldwide scope is appropriate.

22 Secondly, with that in mind, I looked at the  
23 sales revenue associated with the products that are  
24 accused of infringement.

25 On the right-hand side, in the dark gray box,

Ryan Sullivan - Direct

1716

1 you'll see royalty rate. There are three primary items  
2 there. The first is looking at the value of the patents  
3 to Norton. And I will do this on a revenue basis. I will  
4 then apply profit margins to convert that revenue to  
5 profit and then I will effectively split that profit so  
6 that some of it goes to Columbia as a royalty and some is  
7 maintained by Norton and Symantec as part of its  
8 profitability.

9 And all of this is informed by the items noted  
10 at the top, exclusivity or nonexclusivity, the duration,  
11 the time period covered, as well as the structure of the  
12 royalty.

13 Q So, Dr. Sullivan, we'll walk through these eight  
14 factors that you looked at, but maybe we can just quickly  
15 check off two of them. Would you tell us what your  
16 findings were with respect to exclusivity and duration?

17 A For exclusivity, I found that the license for the  
18 hypothetical negotiation would be nonexclusive. And this  
19 means that I looked at the value of the patented  
20 technology to Symantec and Norton, not the additional  
21 value from excluding others from utilizing the technology.

22 And with regards to duration, the damages period  
23 that I utilized went from the issuance of the patents --  
24 so December 2011 and December 2013 -- up through the  
25 latest provision of data from Norton, which went through

Ryan Sullivan - Direct

1717

1 February of this year. So February 2022.

2 Q And, Dr. Sullivan, do you understand there to be any  
3 dispute on these two issues, exclusivity and duration,  
4 between Columbia and Norton or do you understand Norton  
5 agrees with the testimony just provided?

6 A I'm not aware of any dispute on those items.

7 Q So, again, just so we understand just a little bit,  
8 Dr. Sullivan, why not just take a percentage of the yellow  
9 box, the royalty base? Why do you go to the black box to  
10 come to a reasonable royalty calculation?

11 A The idea there is that there are additional items,  
12 features, functionalities that contribute to the sales of  
13 the accused products. And thus, what I have done is  
14 isolated the value contribution of the patented technology  
15 separate and apart from other features, functionalities  
16 and contributions that are made by Norton and Symantec.

17 Q And is it fair to say that your calculation of each  
18 of the factors in the black box actually ends up reducing  
19 the amount of money that Columbia is seeking?

20 A That is correct.

21 Q Now, is there, in this negotiation that you are going  
22 to talk to the jury about, a set of factors that damage  
23 experts and reasonable royalty tasks typically consider to  
24 get some insight as to what would have happened in that  
25 negotiation?

Ryan Sullivan - Direct

1718

1 A Yes. The *Georgia-Pacific* factors.

2 Q And can we turn to your slide 12? I know there's a  
3 lot of information on here, but just at a very high level,  
4 tell us what the *Georgia-Pacific* factors are.

5 A These are 15 factors that were set forth by a court  
6 approximately 52 years ago, in 1970. These are factors  
7 that can be informative and helpful in determining a  
8 reasonable royalty.

9 Q And let me show you your next slide, slide 13. Tell  
10 us how the *Georgia-Pacific* factors set out by the Court,  
11 you know, fit within the hypothetical negotiation  
12 framework that you've described for us.

13 A Factor 15 is the culmination of the *Georgia-Pacific*  
14 factors and the result or outcome of a hypothetical  
15 negotiation. You'll see the highlighted piece here states  
16 that it's, "The amount that the licensor (such as the  
17 patentee)" -- that's the patent holder -- "and a licensee  
18 (such as the infringer) would have agreed upon (at the  
19 time the infringement began) if both had been reasonably  
20 and voluntarily trying to reach an agreement."

21 And this is the basic framework that I have  
22 utilized.

23 Q And, Dr. Sullivan, we'll go back to the factors that  
24 you talked about on slide 11, but have you considered all  
25 of the *Georgia-Pacific* factors to a degree?

Ryan Sullivan - Direct

1719

1 A Yes, I have.

2 Q And would you explain that to us in your next slide,  
3 slide 14?

4 A So what I have done here is I have noted which  
5 factors apply to which task or component of the royalty  
6 analysis. The geographic scope is related to  
7 *Georgia-Pacific* factor 3. Norton sales are related to  
8 factors 8, 10, and 11. The value of the patents to Norton  
9 is related to factors 6, 8, 9, 10, 11, 12, 14, and 15.  
10 Profit margins are related to factor 8. Relative  
11 contributions are related to factors 5 and 13.  
12 Exclusivity is related to factor 3. Duration, factor 7.  
13 Structure, factors 3 and 11.

14 And I'll just note real briefly at the bottom  
15 you'll see three other factors -- factors 1, 2, and 4 --  
16 which turn out not to be informative in this particular  
17 case. Those relate to other agreements, and there are not  
18 other agreements that are informative for the patent  
19 infringement side of this case. And factor 4 relating to  
20 particular policies that also are not effective of the  
21 royalty.

22 Q All right. So let's now start with these factors,  
23 Dr. Sullivan. Let's talk about the first one under the  
24 royalty base, geographic scope, and I think you told us  
25 that's a question of which Norton customers would be

Ryan Sullivan - Direct

1720

1 covered by the license; is that right?

2 A Correct.

3 Q And do you have an understanding whether there is a  
4 disagreement there between Norton and Columbia?

5 A Yes, there is disagreement.

6 Q And let's let the jury know what the practical impact  
7 of that disagreement is.

8 A For the overall amount of sales, roughly half are  
9 made to customers who are located within the United States  
10 and the other half are to customers who are located  
11 outside of the United States.

12 Q And what did you conclude that Norton and Columbia  
13 would agree to with respect to the coverage of Norton's  
14 customers?

15 A In my view, they would have agreed to a worldwide  
16 license that would have included sales to all customers  
17 throughout the world. This would enable Symantec and  
18 Norton to be able to provide product sales to customers  
19 throughout the world, not just within the United States.

20 Q And is it fair to say that if the license did not  
21 cover customers outside of the United States, then  
22 Norton's sales to those customers would remain infringing  
23 sales?

24 A That is my understanding, yes.

25 Q All right. Using your slide 15, tell us, again at

Ryan Sullivan - Direct

1721

1 kind of a high level, of what evidence and facts you  
2 considered in this case to reach your opinion that Norton  
3 and Columbia would agree to a license to cover customers  
4 outside the United States?

5 A At a high level, there are three primary items. The  
6 first is that the accused products were created in and  
7 distributed from the United States. The second is that  
8 licensing and activation of those products occurs from the  
9 United States, and there are substantial activities that  
10 constitute the infringement as alleged that occurred  
11 within the United States.

12 Q So, Dr. Sullivan, using your slide 16, does the fact  
13 that your opinion that Norton and Columbia would want to  
14 cover customers outside the United States mean that this  
15 license would have anything other than patents issued by  
16 the United States?

17 A No. This is still very specific to United States  
18 patents. However, it is the activities and the way the  
19 business is constructed at Symantec and Norton such that  
20 it is the infringing activity, as I have assumed it,  
21 within the United States that enables the global sales.

22 Here, this graphic is intended to reflect that  
23 there are infringing activities, or activities that are  
24 accused of infringement, that occur within the U.S., and  
25 in particular, within California and Arizona, that enable

Ryan Sullivan - Direct

1722

1 sales to customers throughout the world.

2 Q All right. And then in looking at some of the  
3 evidence that you reviewed for the three factors you just  
4 told us about, did you see evidence that the Norton  
5 accused products were actually created and distributed in  
6 the United States even though they went to customers  
7 outside the United States?

8 A Yes.

9 Q And using your slide 17, could you explain some of  
10 that evidence to us, please?

11 A So let's start off taking a look at the graphic on  
12 the right-hand side here, and there are activities that  
13 are occurring within the United States, including  
14 developing, designing and preparing the software.

15 That software then gets delivered both within  
16 the U.S. and throughout the entire world to customers, and  
17 predominantly that occurs through delivery companies that  
18 are referred to as CDNs. It's the content delivery  
19 network. You may have heard these referred to in the past  
20 from companies like Verizon, Microsoft Azure -- that's  
21 A-Z-U-R-E -- and Akamai, A-K-A-M-A-I.

22 Q And, Dr. Sullivan, did you rely on some testimony  
23 that you've cited here on slide 17 from Norton's global  
24 director of new products introduction, Ms. Brennan, at  
25 page 42, lines 5 to 7 of her deposition?

Ryan Sullivan - Direct

1723

1 A Yes. Linda Brennan is an employee of Symantec/Norton  
2 that was designated as a corporate representative on  
3 topics such as this. And she explained that what she  
4 referred to as a single point of truth for all customers  
5 globally is Culver City. Culver City is a city that's in  
6 the Los Angeles area of California.

7 And what this means is that the software  
8 created -- the final software is created in Culver City,  
9 and it is from there then delivered to customers  
10 throughout the world.

11 Q And I think, Dr. Sullivan, you provided us with -- I  
12 think it's two more slides of testimony from Norton  
13 witnesses that you relied on to conclude that the products  
14 that customers outside the United States bought were  
15 actually created in the United States, designed,  
16 developed, mastered by Norton in the United States; is  
17 that correct?

18 A Yes. So briefly, at the top left, more testimony  
19 from Ms. Brennan indicating that the design and  
20 development of the masters occurred in Culver City, in the  
21 United States.

22 On the bottom left, Dermot Wall, who's a senior  
23 director of product management, similarly testified that  
24 the Norton product line was designed and developed in the  
25 United States in Culver City.

Ryan Sullivan - Direct

1724

1 On the top right, Jokul Tian, who's a  
2 development director of the STAR team, indicated that the  
3 SONAR content and the trees, the decision trees for SONAR,  
4 were created and developed within the United States.

5 And at the bottom right, Pedro Reyes, senior  
6 manager of development at Symantec, who was in charge of  
7 the STAR team handling the build of the BASH component,  
8 indicated that that occurred in the United States, with  
9 that team being in the U.S.

10 MR. BEENEY: And just for the record, slide 18  
11 refers to Ms. Brennan's testimony at 106:4 to 7 and 92:21  
12 to 22.

13 Mr. Tian's testimony at 89:19 to 24.

14 Mr. Reyes' testimony at 46:22 to 47:3.

15 And Mr. Walls' testimony at 49:25 to 50:4.

16 BY MR. BEENEY:

17 Q And, Dr. Sullivan, did you see any further evidence  
18 that Norton created in the United States the software that  
19 it is accused of infringing that it sold to customers  
20 outside the United States?

21 A Yes, I did.

22 Q And so let's move to slide 19, please, and would you  
23 explain to us what this is?

24 A So three different pieces of testimony here that I  
25 viewed to be relevant. On the left-hand side, Ms. Linda

Ryan Sullivan - Direct

1725

1 Brennan explaining that the master version is maintained  
2 and deployed out of Culver City.

3 On the right, Carey Nachenberg, who was a fellow  
4 at Symantec, indicated that for Symantec Endpoint  
5 Protection, that the golden disc, or the final piece of  
6 software, was developed and distributed from the  
7 United States, in particular, from Culver City.

8 And again, bottom right, testimony from Pedro  
9 Reyes indicating that what is a master version, that that  
10 is what is eventually sold to customers.

11 Q And, Dr. Sullivan, why was this testimony to your  
12 opinion that a license would cover customers outside the  
13 United States?

14 A This demonstrates that it is the product that was  
15 created within the United States that is then being sold  
16 and delivered to customers both within the United States  
17 as well as worldwide, that it is that very product.

18 And if you were to think of it as something  
19 physical -- I was talking about basketball earlier. If it  
20 was a basketball and it was created here in the  
21 United States and then shipped abroad, that would still,  
22 as a matter of economics, be considered part of that  
23 royalty base for calculating a royalty.

24 MR. BEENEY: And forgive the interruption, but  
25 just for the record slide 19 refers to Mr. Nachenberg at

Ryan Sullivan - Direct

1726

1 146:22 to 147:4. Mr. Reyes at 35:19 to 21. And  
2 Ms. Brennan 37:18 to 21, 39:8 to 10, and 106:15 to 19.

3 BY MR. BEENEY:

4 Q Dr. Sullivan, was the way that Norton -- I think you  
5 mentioned to us content delivery networks, but was the way  
6 that Norton distributes the products to customers outside  
7 the United States, did that impact your opinion on the  
8 scope of the license to cover customers outside the  
9 United States?

10 A Yes, it did.

11 Q And let's look at your slide 20 to explain that,  
12 please.

13 A There really are three paths of delivery or  
14 distribution of the product.

15 The first is through a CDN, as I mentioned, a  
16 content delivery network. And the second is a physical  
17 disc that might be sold. It comes from a box, and it's a  
18 physical product delivery, and the third is OEM, original  
19 equipment manufacturer, and this is where the product is  
20 preinstalled, for example, on a computer and then that  
21 computer is purchased by a customer.

22 And what Ms. Brennan testified to is explaining  
23 that for each of these three paths, that what's being  
24 delivered to customers is the product that was created and  
25 stored in Culver City, California.

Ryan Sullivan - Direct

1727

1 MR. BEENEY: And again, for the record, slide 20  
2 refers to Ms. Brennan at 42:13 to 17, 42:8 to 12, and  
3 42:18 to 21.

4 BY MR. BEENEY:

5 Q Dr. Sullivan, of the three methods you list here,  
6 what did the evidence tell you is the most common way that  
7 Norton distributes its products?

8 A Through CDNs.

9 Q And let's turn to slide 21, and can you explain that  
10 to us, please?

11 A Sure. So a CDN, a content delivery network, I think  
12 of it as an electronic FedEx or UPS. They take a product  
13 that is here in the United States. It is placed on a  
14 server in the United States and then set up on servers  
15 both throughout the U.S. as well as worldwide, and that's  
16 to help optimize the delivery of that software and make it  
17 most efficient for consumers who are downloading that  
18 software.

19 And here again, referring to Ms. Brennan and her  
20 testimony demonstrates that the CDN is delivering the  
21 software as it was created in Culver City, and the CDN  
22 does not make any changes to that software, and in fact,  
23 Symantec and Norton take steps to ensure that there are no  
24 changes to that software so that it stays as that -- as  
25 intended so that the customer does receive precisely what

Ryan Sullivan - Direct

1728

1 it is that was created by Symantec and Norton.

2 Q And so far, Dr. Sullivan, you have shown us your  
3 reliance on Norton's own executives and Norton's own  
4 documents created at the time. Is that accurate?

5 A Yes.

6 MR. BEENEY: And again, for the record,  
7 apologize for the interruption, slide 21 is Ms. Brennan,  
8 52:9 to 20.

9 BY MR. BEENEY:

10 Q Let's turn to the next -- well, let me ask you  
11 another question, Dr. Sullivan. I'm sorry.

12 When you talk about a content delivery network,  
13 should we consider that as being similar to a sales  
14 distributor?

15 A Actually, I would not think of it that way. It  
16 really is much more similar to a delivery -- electronic  
17 delivery such as UPS or FedEx. It is not a sales  
18 distributor because the CDN is not making the sales. They  
19 are not coordinating with the customer making that sale or  
20 the transaction. They are simply delivering the product  
21 just as if you were to order from Amazon and get that  
22 product through UPS or FedEx.

23 Q So to go into a little bit more understanding of how  
24 Norton distributes its products to customers outside the  
25 United States, would you tell us what's on your slide 22

Ryan Sullivan - Direct

1729

1 with respect to content delivery networks and why you  
2 believe those suggest that a license would have to cover  
3 customers outside the United States?

4 A The software begins in Culver City and then is  
5 uploaded to a content delivery server. Those initial  
6 servers are referred to as jump off servers, and so where  
7 those servers are located is within the United States.

8 And as indicated by the testimony of David Kane,  
9 who's a technical director at Symantec/Norton, as well as  
10 the deposition testimony of Pedro Reyes, they both  
11 indicate that the jump off servers for the content  
12 delivery network providers such Akamai, Verizon and Azure  
13 were all located within the United States.

14 MR. BEENEY: And slide 22 refers to Mr. Reyes at  
15 50:7 to 15. And Mr. Kane, 93:1 to 8.

16 BY MR. BEENEY:

17 Q So from an economic point of view, Dr. Sullivan, is  
18 it appropriate to conclude that when a product is made in  
19 the United States and has all of the connections to the  
20 United States that you referenced to then conclude that  
21 Norton and Columbia would reach a license to cover those  
22 sales from the United States?

23 A Yes. That is, in my view, the reasonable and  
24 appropriate economic conclusion.

25 Q Now, you told us earlier that most of Norton's sales

Ryan Sullivan - Direct

1730

1 were done through these content delivery networks. Have  
2 you relied on a Norton document to confirm that?

3 A Yes, I have.

4 Q And let's show you your slide 23, please, and tell us  
5 what this shows.

6 A This is indicating, over time, how Norton 360 was  
7 delivered, what that channel was. And you'll see that  
8 over three-fourths, over 75 percent of sales were online  
9 sales, which would have been delivered through a content  
10 delivery network. And in particular, I'm looking at the  
11 far right of this slide because that is in 2011, which is  
12 most similar to the timing of the hypothetical  
13 negotiation, there's approximately 5 percent of sales that  
14 are made through OEMs, the original equipment  
15 manufacturers. And those are provided to those OEMs both  
16 electronically and through disc.

17 The retail sales, which are only about 10 or  
18 15 percent of sales, are those physical discs that I was  
19 referring to earlier. And then there's a small sliver of  
20 sales that are made through ISPs, which are Internet  
21 Service Providers, and those two are electronic sales.

22 THE COURT: Can you please remind the jury what  
23 OEM sales are?

24 THE WITNESS: Original equipment manufacturer.  
25 So you can think of that as perhaps a Dell computer or HP,

Ryan Sullivan - Direct

1731

1 and when you buy a laptop or a desktop computer, sometimes  
2 those computers will come with the Symantec or Norton  
3 software preinstalled on it.

4 THE COURT: Thank you.

5 MR. BEENEY: And slide 33 refers to PX-324,  
6 which is dated May 19th, 2011.

7 BY MR. BEENEY:

8 Q So, Dr. Sullivan, we've been focusing on new product  
9 sales, but I also want to ask you about how Norton  
10 distributes its updates, called LiveUpdates, to existing  
11 customers. First of all, what is a LiveUpdate?

12 A LiveUpdates really include two types of updates.  
13 There are updates to the software itself, new versions and  
14 revisions to that software. And secondly, the updates to  
15 some of the information that's utilized by that software,  
16 antivirus, signature databases, decision trees and the  
17 like.

18 Q And does evidence of how Norton distributes these  
19 updates impact your opinion about whether Columbia and  
20 Norton would agree to a license to cover customers outside  
21 the United States?

22 A Yes. It further informs and supports my view that a  
23 worldwide license is appropriate here.

24 Q And would you turn to slide 24, please, and tell us  
25 what the -- again, Ms. Brennan is becoming a star -- what

Ryan Sullivan - Direct

1732

1 Ms. Brennan's testimony told you?

2 A So here is additional testimony from Ms. Brennan  
3 indicating that the LiveUpdates that I just explained come  
4 from Culver City, California, and those are delivered  
5 through content delivery networks originating from Culver  
6 City.

7 MR. BEENEY: And, again, slide 24 is Ms. Brennan  
8 at 16:20 to 17:6.

9 BY MR. BEENEY:

10 Q Moving on to a related factor to the scope of the  
11 license but yet another issue of connection to the  
12 United States, when a Norton customer downloads or  
13 installs a copy of the Norton accused product accused of  
14 infringement, does the customer have to agree to a license  
15 to use what the customer has bought?

16 A Yes, they do.

17 Q And where does Norton host the system to agree to  
18 that license?

19 A That system, both for licensing as well as what is  
20 referred to as activation occurs within the United States.  
21 So the servers that handle licensing that provides the  
22 authorization and activation are all within the  
23 United States.

24 Q So just to talk about activation a little bit more  
25 for a second, is it fair that when a customer outside the

Ryan Sullivan - Direct

1733

1 United States downloads the product, they can't use it  
2 unless they have agreed to the license and Norton then  
3 activates the product?

4 A That is correct.

5 Q All right. Let's take a look at slide 25, and tell  
6 us what that has told you about activation and licensing.

7 A This is deposition testimony from Dermot Wall, and he  
8 is indicating, on the left-hand side, that the licensing  
9 servers are based in the United States, Virginia and  
10 Arizona, and that secondly, on the right-hand side, that  
11 the activation and the infrastructure for that on the  
12 server side is also in the United States, in Arizona and  
13 Virginia.

14 Q And, again, you're relying entirely on what Norton  
15 has told us?

16 A Yes.

17 Q And would you expect Norton to disagree with their  
18 executives' sworn testimony?

19 A I sure would not expect that.

20 MR. BEENEY: Slide 25 cites Mr. Wall at 15:14 to  
21 21, and 16:11 to 16.

22 BY MR. BEENEY:

23 Q So, Dr. Sullivan, we've heard about something called  
24 BASH model submissions where customers send information  
25 back to Norton. Where do the customers from around the

Ryan Sullivan - Direct

1734

1 world send these BASH submission models back to Norton?

2 A Within the United States. So that is part of the  
3 GIN, or global intelligence network, that Symantec and  
4 Norton have utilized where they take information from all  
5 the customer endpoint computers throughout the world, and  
6 those submissions come back to the United States and the  
7 servers here.

8 Q So let's talk about what I think is the last factor  
9 that I'm going to ask you about, Dr. Sullivan, about the  
10 scope of the license. Is it relevant to your  
11 determination where Norton brings its business customers  
12 to do its sales pitch?

13 A I do believe that is informative.

14 Q And why is that?

15 A Where the sales occur, in terms of where the sales  
16 pitch, the sales tool actually is, I'll show you, being  
17 within the United States within their executive briefing  
18 center, is where Norton and Symantec have brought their  
19 customers to help cause them to make purchases of their  
20 products.

21 Q Again, let's turn to slide 26, and tell us what  
22 Norton told you about this issue.

23 A So here on the right-hand side, you'll see deposition  
24 testimony from Fauzia Khan, who's a senior executive  
25 briefing manager, explaining that roughly 90 percent of

Ryan Sullivan - Direct

1735

1 Symantec's enterprise customers, the corporate customers,  
2 are brought to the EBC, which is the Executive Briefing  
3 Center, where they are effectively being sold on the  
4 product. And this comes in multiple forms, trying to keep  
5 customers from going to a different supplier, trying to  
6 maintain those customers and explain to them the benefits  
7 and features of the products.

8 Q And slide 26 is --

9 MR. BEENEY: I'm sorry. Just go back, if you  
10 would, so I can read it for the record is Khan 162:11 to  
11 16, 164:7 to 11, and 164:13 to 17.

12 BY MR. BEENEY:

13 Q So, Dr. Sullivan, I think we can wrap up this factor  
14 of the geographic scope of the license. We've talked  
15 through a lot. So let's take a look at slide 27, and  
16 basically, tell the jury what your takeaway is from all  
17 the Norton evidence that you reviewed.

18 A In my view as a matter of economics, it is very clear  
19 that the royalty base would include sales to customers  
20 throughout the world, not just the United States. The  
21 design and development of the products occurs here in the  
22 United States. The masters are created here in the  
23 United States. New products are distributed through  
24 content delivery networks that originate from the  
25 United States. LiveUpdates are distributed from the U.S.

Ryan Sullivan - Direct

1736

1 Licensing and activation occurs within the United States,  
2 and the executive briefing center for sales to enterprise  
3 customers is located within the United States.

4 MR. BEENEY: All right. So let's move on to  
5 another factor.

6 THE COURT: I think this is a good breaking  
7 point if you're moving on to something new. So we'll take  
8 our first break of the day. It's -- we'll come back at  
9 11:10. That's a 30-minute break.

10 And I'll give you the same admonition, you  
11 haven't heard all the evidence yet so keep an open mind,  
12 and don't speak to each other or look anything up.

13 Please, everybody remain seated while the jury  
14 leaves the courtroom.

15 (The jury exited the courtroom.)

16 THE COURT: All right. We're prepared to take  
17 the break?

18 MR. BEENEY: We are, Your Honor.

19 THE COURT: All right. So, Dr. Sullivan, I'll  
20 tell you now, and I'll have to tell you again in front of  
21 the jury, you remain under oath, and we'll see you all  
22 again at 11:10.

23 MR. BEENEY: Thank you.

24 THE COURT: Thank you, all.

25 (Recess taken from 10:43 a.m. until 11:10 a.m.)

Ryan Sullivan - Direct

1737

1 THE COURT: All right. Are you ready to  
2 proceed?

3 MR. BEENEY: Yes, Your Honor. Thank you.

4 THE COURT: Okay. Let's bring the jury in,  
5 please.

6 (The jury entered the courtroom.)

7 THE COURT: Are you all ready to go?

8 Dr. Sullivan, you're still under oath, and we'll  
9 continue with direct.

10 MR. BEENEY: Thank you, Your Honor.

11 BY MR. BEENEY:

12 Q Welcome back Dr. Sullivan.

13 A Thank you.

14 MR. BEENEY: So can we put up slide 11, please?

15 BY MR. BEENEY:

16 Q So, Dr. Sullivan, just to orient us, I think these  
17 were the things that you told the jury that you did to  
18 come to your opinion and we've talked about exclusivity,  
19 duration and now geographic scope. So let's finish up the  
20 yellow box and talk about Norton sales. How did you go  
21 about determining the amount of Norton sales?

22 A I utilized the financial data that was supplied and  
23 produced by Symantec and Norton for the accused products  
24 and I tabulated those sales data across time.

25 MR. BEENEY: May we have Dr. Sullivan's slide

Ryan Sullivan - Direct

1738

1 28, please?

2 BY MR. BEENEY:

3 Q Dr. Sullivan, tell us what slide 28 shows us.

4 A This provides a depiction of the sales for the period  
5 from December 2011 -- more specifically from December 6th,  
6 2011, through February 2022.

7 As I noted earlier, the total amount of sales is  
8 \$18,511,272,696. These sales occurred across time. What  
9 I'm showing here is the accumulation of those sales by  
10 year. So these are not at annual sales but rather how  
11 they accumulated. And you can see by the end in 2022,  
12 based upon the vertical axis, it is roughly \$18 and a half  
13 billion, such that the darker gray boxes at the top of  
14 each column, those are the annual sales that get  
15 accumulated that then become part of the royalty base  
16 across time.

17 Q And, Dr. Sullivan, do you understand whether Norton  
18 is disputing that it made \$18 and a half billion of sales  
19 of accused products?

20 A I am not aware of any dispute in that regard.

21 Q Would you turn to the binder in front of you,  
22 Dr. Sullivan, that contains sales data that's produced by  
23 Norton.

24 And, folks, if you forgive me for doing this,  
25 but for the record, I want to ask you what PX-531 to 535,

Ryan Sullivan - Direct

1739

1 566 to 570, 575 to 579, 617 to 621, 627 and 843 to 853,  
2 what are those exhibits?

3 A These are a collection of all of the sales data that  
4 I relied upon in calculating the reasonable royalties.

5 Q Thank you.

6 So now going back to slide 28.

7 THE COURT: I'm sorry. You were looking in  
8 Dr. Sullivan's binder.

9 MR. BEENEY: Yes, Your Honor, in that sales  
10 binder. I hope I correctly listed all the exhibits so  
11 that we have them in evidence to the extent anybody wants  
12 to use them.

13 THE COURT: Okay.

14 MR. BEENEY: Thank you.

15 BY MR. BEENEY:

16 Q So, Dr. Sullivan, going back to slide 28, is all of  
17 the \$18 and a half billion of value that Norton received  
18 from selling accused products attributable to Columbia's  
19 patented technology?

20 A No, it is not. A portion of it is, but not all of  
21 it.

22 Q And do you understand that Columbia is asking for a  
23 share of that that is attributable to the value of the  
24 patented technology?

25 A That is correct.

Ryan Sullivan - Direct

1740

1 Q All right. So if we go back to slide 11, we now have  
2 talked about duration, exclusivity. We have the royalty  
3 base, I think?

4 A Yes, we do.

5 Q And so now let's talk about the factor at the top  
6 right, structure. What is structure, Dr. Sullivan?

7 A Structure refers to whether the royalty would be a  
8 running royalty, such as a percentage of sales that occurs  
9 across time, or it could also be considered as a lump sum  
10 royalty, which would be a single payment that is made at  
11 the time of the hypothetical negotiation, say, in  
12 December 2011.

13 The key distinction is to recognize that  
14 regardless of whether that structure should be a running  
15 royalty or a lump sum, that it should reflect the extent  
16 of use of the technology and the value contribution of  
17 that technology across time.

18 Said another way, the structure should not be  
19 determining the amount of the royalty. It's just a matter  
20 of timing of the payment. In my view, the most likely  
21 outcome of the hypothetical negotiation is a running  
22 royalty, which would be payable across time as the sales  
23 occur. And that allows the reasonable royalty to  
24 correspond to the amount of the use of the technology, and  
25 thus, would be economically fair and reasonable to the

Ryan Sullivan - Direct

1741

1 parties.

2 Q And, Dr. Sullivan, did you rely on evidence that  
3 actually at a point in time, Norton offered a running  
4 royalty structure for a license to the Application  
5 Community's intellectual royalty?

6 A Yes.

7 MR. BEENEY: May we look at slide 29, please?

8 BY MR. BEENEY:

9 Q And tell us what that is.

10 A That is an e-mail chain that I believe has been  
11 presented previously from Brian Witten at Symantec in  
12 November 2005. So this occurred shortly after the filing  
13 of the patent application that underlies the '115 and '322  
14 patents.

15 Here, you will see that there is reference to a  
16 royalty rate being negotiable between half percent and  
17 .25 percent, which would be a running royalty. So this  
18 does consider that there would be a running royalty.

19 There's a particular focus on half a percent.  
20 As it indicates that Brian Witten here states, "I note  
21 that half percent of a billion dollars annually is  
22 \$5 million per year."

23 But there are some key differences between the  
24 offer that is made here and the hypothetical negotiation.

25 Q And what are those, Dr. Sullivan?

Ryan Sullivan - Direct

1742

1 A Well, there's a few of them. First off, this is  
2 occurring in 2005 with a patent application, nonissued  
3 patent, and as I'll show you later, issued patents, all  
4 else equal, have higher values than a patent application.

5 Secondly, at the point in time of this offer,  
6 there was not a commercialization of the patented  
7 technology in terms of being implemented into Symantec's  
8 products. Importantly, this is just an offer that is  
9 being made, and the fact that we all are here today  
10 evaluating a reasonable royalty demonstrates that this  
11 amount was not acceptable to Columbia.

12 And one other item I should clarify is that this  
13 amount was for a nonexclusive license, and that is made  
14 clear at the beginning of this document. So it's a  
15 follow-on e-mail to this chain demonstrating that the half  
16 percent to quarter percent is reflective of a nonexclusive  
17 license, not an exclusive license.

18 Q Thank you.

19 MR. BEENEY: And slide 29 refers to PX-83.

20 BY MR. BEENEY:

21 Q Did you see other evidence from Norton, Dr. Sullivan,  
22 that led you to conclude that Norton would be seeking a  
23 license in the form of a running royalty?

24 A Yes. Deposition testimony from Ms. Mutu in  
25 particular.

Ryan Sullivan - Direct

1743

1 Q Let's just take a quick look at that, if we can, on  
2 slide 30, and tell us what slide 30 shows, please.

3 A Corina Mutu is the director of revenue accounting for  
4 Symantec/Norton. She indicated and testified that the  
5 license agreements that she was aware of for which  
6 Symantec pays royalties were structured as a revenue  
7 share, and that is reflective of a percentage running  
8 royalty.

9 MR. BEENEY: And slide 30 cites Ms. Mutu at  
10 45:10 to 45:18.

11 THE COURT: I'm sorry. Mr. Beeney, that's  
12 really hard to hear because you're turning away to look at  
13 the small print.

14 MR. BEENEY: Oh, I'm sorry.

15 THE COURT: And I just want to be sure we  
16 capture everything.

17 MR. BEENEY: Sorry. So slide 30 refers to  
18 Ms. Mutu at 45:10 to 45:18.

19 BY MR. BEENEY:

20 Q So, Dr. Sullivan, you know, that deals with the  
21 structure that Norton would agree to. Did you also see  
22 evidence of the structure that Columbia would agree to?

23 A Yes, I did.

24 Q And what was that?

25 A Two items. One, I had an interview with Mr. Orin

Ryan Sullivan - Direct

1744

1 Herskowitz of Columbia University, and also reviewed  
2 deposition testimony indicating that Columbia would prefer  
3 and, in Mr. Herskowitz's view, would demand and require a  
4 running royalty for the technology at issue here.

5 Q And, Dr. Sullivan, just so that we're clear, would  
6 you in every case opine or give us an opinion that a  
7 running royalty was the appropriate structure or is that  
8 based on the evidence in this case?

9 A That is based on the evidence in this case. Facts  
10 and information and situations vary from negotiation to  
11 negotiation, yet the underlying principle that regardless  
12 of the structure that the royalty needs to account for the  
13 extent of use really is important.

14 Q And so based on your opinion about what Norton and  
15 Columbia said about a running royalty structure, does that  
16 inform the way you've expressed a reasonable royalty in  
17 terms of sales and rate equaling reasonable royalty?

18 A Yes. It provides the foundation for that formulation  
19 of the reasonable royalty. But, again, what's important  
20 is the outcome of that hypothetical negotiation in terms  
21 of the amount such that it should reflect that extent of  
22 use by Symantec and Norton of the technology.

23 Q And does that structure reflect the concept that if  
24 Norton made no sales of accused products, it would pay  
25 Columbia nothing, but that if Norton made huge sales of

Ryan Sullivan - Direct

1745

1 Columbia -- excuse me -- of accused products, it would pay  
2 a more substantial sum?

3 A Correct. As the sales and use of the accused  
4 functionality and the products incorporating that  
5 functionality increases, then the royalty should increase.

6 Q So let's go back to slide 11 and kind of check off  
7 the boxes of what you've done. I think we've taken care  
8 of everything but what's in the black box; is that right,  
9 Dr. Sullivan?

10 A Correct. So we now have to determine the royalty  
11 rate.

12 Q All right. So did you look at evidence that led you  
13 to reach an opinion of the value of the patents to Norton?

14 A Yes, I did.

15 Q And let's go to slide 31 if we could, please. Could  
16 you explain this chart to the jury, please, Dr. Sullivan?

17 A Yes. There are five factors that I utilize to  
18 determine what that royalty rate is, three of which you  
19 have effectively already seen before. Those are  
20 apportionments that go from the product as a whole down to  
21 malware detection, from malware to SONAR, from SONAR to  
22 the patented invention. That is effectively the revenue  
23 that is attributable to the patented invention.

24 I then apply a profit margin to convert that  
25 revenue into profit, and then I calculate Columbia's

Ryan Sullivan - Direct

1746

1 contribution to that profit. And when multiplying all of  
2 those factors together, that yields or provides the  
3 royalty rate.

4 Q And did you do the calculation of how much of -- you  
5 know, for example, a dollar of Norton's sales were  
6 attributed to malware because the product does other  
7 things and how much of the malware was attributed to SONAR  
8 because there were other malware detection in the product  
9 and then how much of SONAR is attributable to the patented  
10 invention? Did you do those first three calculations?

11 A I investigated and researched that issue, yet I also  
12 talked with and interviewed Dr. Eric Cole and ultimately  
13 decided to rely upon his quantification, the numbers that  
14 he calculated for each of those items.

15 Q And in your field as an economist, is it appropriate  
16 for you to use calculations done by someone who's spent  
17 their life in the industry itself, determining values of  
18 different components of malware products?

19 A Yes, in my view, that is entirely reasonable.  
20 Dr. Cole is clearly an expert in these areas.

21 Q All right. So let's then move on to slide 32, which  
22 I think is something that you've modified from Dr. Cole.  
23 And would you tell us what this is, please?

24 A Yes. So I borrowed the graphic of the rectangles  
25 from Dr. Cole, the yellow reflecting the accused products

Ryan Sullivan - Direct

1747

1 in terms of the sales price or the overall sales revenue.  
2 That would be the money that comes into Symantec and  
3 Norton. The red box reflects the apportionment to malware  
4 detection. Dr. Cole determined that on a product by  
5 product basis, and it ranges from 60 percent to  
6 95 percent.

7           You'll see on the right-hand side of this slide  
8 that I have those boxes that I was showing you earlier.  
9 And the top box has 73.6 percent. So when I look at the  
10 data for the sales of the products and that product mix,  
11 you know, different product sales across time, the overall  
12 weighted average is 73.6 percent.

13           Similarly, looking at the purple box, that's the  
14 apportionment within malware to SONAR, which is 23 to  
15 25 percent. The overall weighted average is 23.6 percent,  
16 and for the patented invention, the green box is an  
17 apportionment of 35 percent.

18           And I'd like you to keep in mind that this green  
19 box is reflective or represents the revenue that is  
20 attributable to the patented invention separate and apart  
21 from all other features and functionalities. And so the  
22 royalty rate that I'm going to calculate from there is  
23 going to take a piece of that revenue that's attributable  
24 to the patented invention.

25 Q       And, again, you're doing this because Columbia is

Ryan Sullivan - Direct

1748

1 asking for a share of the value it contributed but not a  
2 share of things in the Norton products it did not  
3 contribute to?

4 A That's right.

5 THE COURT: I'm going to interrupt you and  
6 confirm, the 73 percent, where did that come from?

7 THE WITNESS: You may recall that Dr. Cole  
8 referenced 74 percent as the overall average. Me, being  
9 more precise on it, refer to it as 73.6. It is the  
10 weighted average for apportionment for malware detection  
11 that ranges from a low of 60 percent to a high of  
12 95 percent depending upon the product. And given that  
13 there's different amounts of sales of the different  
14 products, the overall weighted average amount is  
15 73.6 percent.

16 THE COURT: All right. Thank you.

17 BY MR. BEENEY:

18 Q So, Dr. Sullivan, I want to talk to you about some of  
19 the evidence that you saw that led you to conclude that  
20 these numbers were reasonable; that is, the value of  
21 malware to the product and the value of SONAR to the  
22 malware and the value of the patents to SONAR. But I  
23 think the jury has seen this evidence before, and so  
24 rather than take the jury's time, I'd like to walk through  
25 it a little bit quickly, if that's all right, rather than

Ryan Sullivan - Direct

1749

1 repeat testimony the jury has already seen.

2 But let's move to slide 33, and if you could  
3 tell us briefly how this informed your opinion that these  
4 allocation of value numbers were reasonable?

5 A As an economist doing my work in this case, I  
6 reviewed a great deal of information, did my own  
7 independent research. This is just a small collection of  
8 information that I utilized in my research.

9 You'll see PX-325 indicating Norton's sales and  
10 Symantec sales were declining at around the time of the  
11 hypothetical negotiation, that they were losing market  
12 share because the competition's sales were growing faster  
13 than their sales were growing, and also -- and that was in  
14 PX-325 also.

15 And then in PX-315, that customers were losing  
16 confidence in the Symantec products, and thus, Norton  
17 needed to improve its products in order to stay  
18 competitive and to be able to increase its sales.

19 Q And slide 34, Dr. Sullivan, what did that tell you?

20 A As Dr. Cole mentioned, there was intensifying  
21 competition from freeware that was providing much of the  
22 functionality that the Norton products were providing.

23 And in PX-541, it indicated that there was  
24 fierce competition and that Symantec needed to develop a  
25 defensible competitive advantage through innovation.

Ryan Sullivan - Direct

1750

1           And these issues were noted also by the  
2 deposition testimony of Mr. Wall, who acknowledges,  
3 naturally, that one has to have a product that is superior  
4 to a free product in order to continue to make those  
5 sales.

6           MR. BEENEY: And slide 34 refers to Mr. Wall's  
7 deposition at 180:10 to 20.

8 BY MR. BEENEY:

9 Q Did you see other Norton documents, having recognized  
10 that their products needed something, that they thought  
11 that the accused component of SONAR/BASH had significant  
12 value to Norton's products?

13 A Yes.

14 Q Let's look at slide 35, and tell us what that told  
15 you, Dr. Sullivan.

16 A Here again, I have just a small collection of the  
17 documents that I relied upon in this regard.

18           PX-530 indicated that the portion of SONAR that  
19 is accused of infringement was a huge advantage and turned  
20 in record breaking scores, PX-170 indicating that SONAR  
21 was at the heart of the anti-malware defenses, and PX-506  
22 demonstrating numerically some of the counts of the  
23 machines that were being protected based upon the  
24 detections made per day.

25 Q And then what did PX-170 tell you, Dr. Sullivan?

Ryan Sullivan - Direct

1751

1 A It just indicated that at the heart of the  
2 anti-malware defenses is SONAR.

3 Q And, again, you are relying on evidence from Norton  
4 business records at the time they created them, not what  
5 they are saying here in the courtroom?

6 A That is based upon the documentation at the time that  
7 Symantec created in the ordinary course of business.

8 Q And, again, moving on to the same kind of evidence  
9 that you relied on, let's just take a look at slide 36.  
10 Tell us what that showed you, Dr. Sullivan.

11 A This is demonstrating that detecting that last  
12 1 percent is really important. Here, at PX-350 referring  
13 to that last line of defense as being very important for  
14 behavioral detection.

15 And PX-506 I find to be very compelling from the  
16 perspective of from an economist, that a SONAR detection  
17 equals that they blocked an otherwise guaranteed  
18 infection. And clearly for customers who are getting  
19 infected in spite of having the security software is a bad  
20 outcome for Symantec and Norton.

21 And this is demonstrated also by the deposition  
22 testimony of Archana Rajan, indicating that it's even just  
23 a matter of decimals being able to have that  
24 differentiation.

25 MR. BEENEY: And that's deposition at 282:24 to

Ryan Sullivan - Direct

1752

1 283:22.

2 BY MR. BEENEY:

3 Q Dr. Sullivan, given Norton's own expressed need for  
4 something new, given its own expression that customers had  
5 lost confidence in its product, given the competition from  
6 free substitutes that consumers could buy, are you  
7 surprised that it took Norton a couple of years to raise  
8 prices after incorporating the accused technology?

9 A No, not at all. As a matter of economics, prices  
10 reflect what is occurring in the marketplace. They don't  
11 change immediately, yet given the intensifying competition  
12 as, in part, reflected by the testimony here of Ms. Rajan  
13 indicating the need to be able to differentiate relative  
14 to, for example, freeware, and in the absence of the  
15 innovations and the changes, we would expect the prices to  
16 start to decline over time because of that intensifying  
17 competition.

18 But rather, what occurred is the prices stayed  
19 even, and then over time, they became able to raise their  
20 prices. And that is anticipated and expected in terms of  
21 economics.

22 MR. BEENEY: So let's go back to slide 11, if we  
23 could, please, Mr. Chase.

24 BY MR. BEENEY:

25 Q So I think -- is it right, Dr. Sullivan, that really

Ryan Sullivan - Direct

1753

1 what we have left before we come to your royalty rate is  
2 profit margins and relative contributions and we've done  
3 everything else?

4 A Correct.

5 Q And we look at profit margins. I think you told us  
6 to make sure that Columbia does not get a share of  
7 Norton's costs but only its profits?

8 A Correct.

9 Q So let's go, please, then to slide 37, and it looks  
10 like a big green box. What is that, Mr. Sullivan?

11 A So what I did is I took that green box from the prior  
12 slide, I blew it up here. This is representing  
13 illustratively the revenue attributable to the patented  
14 invention. So if you turn your head, you can see on the  
15 side this is reflecting that patented invention.

16 And what I have done is determined what are the  
17 costs that were caused by this additional revenue. And  
18 here, it is important to recognize that this is only a  
19 slice or a portion of revenue, and thus, we would not  
20 expect that this portion of revenue is causing all costs  
21 to increase. For example, there's not additional research  
22 and development required because the patented technology  
23 is providing that R&D. There's not a requirement that  
24 general and administrative expenses, such as the executive  
25 salaries, would increase, but rather, we need to look at

Ryan Sullivan - Direct

1754

1 what are the costs that are caused by this additional or  
2 incremental revenue.

3 Q So let's talk about how you go about determining  
4 profits from this portion of the revenue of the Norton  
5 accused product. And maybe you can explain that to us  
6 from slide 38, please?

7 A This is a little messy graphically, but what I did is  
8 on the bottom you'll see the white boxes here. There's  
9 implementation at .3 percent. What that means is that the  
10 cost to actually implement this technology was .3 percent  
11 of that incremental revenue. It's actually \$3.6 million  
12 to make that implementation.

13 And as Mr. Nachenberg testified, technologies  
14 that are low cost to implement but deliver high value are  
15 highly valuable because they're profitable. So I deducted  
16 that cost.

17 I also deducted what is known as the cost of  
18 goods sold. So this is the actual cost of being able to  
19 have that product developed and sold. And sales and  
20 marketing costs as well. And cost of goods sold ranges  
21 from 5 percent to 13 percent, depending upon the product.  
22 Sales and marketing ranges from 22 percent to 34 percent,  
23 depending upon the product. Such that all told, that  
24 weighted average, which reflects the product mix, is  
25 33.3 percent. It just happens to be that it is one third

Ryan Sullivan - Direct

1755

1 of that overall revenue.

2           That means here now we have a blue box, which is  
3 smaller than the green, and that means that two-thirds, or  
4 66.7 percent, of that revenue is profit. Such that the  
5 blue box here is representing the additional profit that  
6 Symantec and Norton actually received as a result of the  
7 patented technology.

8 Q     And, Dr. Sullivan, whose records did you rely on to  
9 do these calculations?

10 A     This is all based upon Symantec and Norton's  
11 financial information that is specific to the accused  
12 products.

13 Q     And by doing the calculations on slide 38, is that --  
14 does that assure us that your royalty rate does not give  
15 Columbia a portion of implementation costs, costs of goods  
16 sold, and sales and marketing costs?

17 A     Correct. Those are deducted, or subtracted.

18 Q     In terms of the costs, Dr. Sullivan, you said that  
19 you used a method called incremental costs, and I think  
20 you explained to use costs tied to the profits that were  
21 achieved. Would you use that measure in every case or  
22 again, was that just tied to the facts of this case?

23 A     Well, the notion or the concept of incremental really  
24 applies very broadly, but determining which costs are  
25 incremental depends upon what the increment is.

Ryan Sullivan - Direct

1756

1           So if the increment is relatively narrow, then  
2 it can be the case that not too many costs change and so  
3 there's not much in the way of incremental costs. If the  
4 increment is an entire product line or a business unit,  
5 then it may be that more of those costs should be  
6 deducted.

7           And so the notion of incremental costs really is  
8 broad, but determining which costs are incremental --  
9 again, that means which costs are caused by this -- what  
10 was the green box, that portion of additional revenue  
11 that's attributable to the patented invention -- that's  
12 specific to that particular increment.

13 Q       And so is your next step now to determine how  
14 Columbia and Norton would share the profit caused by  
15 Norton's implementation of the Columbia technology?

16 A       Correct.

17 Q       So tell us about how you do that on the next slide,  
18 please. Slide 39, I believe.

19 A       So I have now taken this blue box, and I convert that  
20 into a circle to try to convey that this is similar to  
21 there being a profit pie that is being split between the  
22 two parties based upon the relative contributions.

23           Columbia, on the one hand, is providing the  
24 invention, the patented technology. Whereas on the other  
25 hand, Norton and Symantec are supplying the

Ryan Sullivan - Direct

1757

1 commercialization. They're getting that product into the  
2 hands of customers to where they are using them. So it  
3 really does take both contributions to be able to realize  
4 that overall amount of profit.

5 I utilize the financial data from Symantec and  
6 Norton to determine those relative contributions. On the  
7 one hand, I utilize research and development expenditures  
8 to reflect the patented invention contribution, and I use  
9 sales and marketing expenditures to reflect  
10 commercialization.

11 Now, I want to be clear that these are not  
12 deductions. I already accounted for the costs. This is  
13 looking at Symantec's and Norton's business, how they  
14 operate their business in terms of how much R&D they  
15 utilize relative to sales and marketing in order to  
16 realize profits.

17 And so this is a reasonable estimation based  
18 upon the actual financial data of Symantec and Norton to  
19 create and determine what the split of this pie would be.

20 Q So in your opinion, Dr. Sullivan, once you get to the  
21 pure profit created in the Norton product just from the  
22 Columbia patents, you would give 70 percent of that profit  
23 to Norton because of its sales and marketing and  
24 30 percent of that profit to Columbia because of its  
25 research and development?

Ryan Sullivan - Direct

1758

1 A Yes. And even more precise, it's 30.2 percent to  
2 Columbia and 69.8 percent to Norton.

3 Q The difference between an economist and a lawyer.

4 So let's go back to slide 11 and I think we're  
5 done with everything in terms of your tasks, Dr. Sullivan,  
6 except relative contributions?

7 A So that provided us with those relative  
8 contributions, and now we can put it all together to  
9 figure out or calculate the royalty rate.

10 Q So let's turn to slide 41, please. And,  
11 Dr. Sullivan, explain what's on slide 41, please.

12 A This is the math, the calculation that provides that  
13 the royalty rate is 1.23 percent. I took the 73.6 percent  
14 for malware detection, multiplied by 23.6 percent for the  
15 apportionment to SONAR, multiplied by 35 percent for  
16 apportionment to the patented invention, multiplied by  
17 66.7 percent to convert that apportioned revenue into  
18 profit, multiplied by 30.2 percent to reflect Columbia's  
19 contribution, and the multiplication of those five factors  
20 provides the royalty rate of 1.23 percent.

21 Q And, Dr. Sullivan, is it your expert opinion that a  
22 reasonable royalty rate that would give Columbia only a  
23 share for the value that its patents created in the Norton  
24 product as a result of the '115 and '322 patents  
25 1.23 percent?

Ryan Sullivan - Direct

1759

1 A Yes. In my view, this is reasonable and appropriate  
2 as the outcome of the hypothetical negotiation, that the  
3 parties would agree to the 1.23 percent.

4 I'm not suggesting that the parties would agree  
5 to each of these individual five factors. Those are the  
6 factors that we utilize to determine a reasonable outcome  
7 of the hypothetical negotiation. The parties may think of  
8 things a little bit differently.

9 If you think about a traditional license  
10 agreement, what it reflects is a percentage royalty  
11 overall, not that there's agreement at every step of the  
12 apportionment. These steps are what enable us to get to  
13 the answer or that outcome.

14 Q And, Dr. Sullivan, have you taken Norton's \$18 and a  
15 half billion of sales of accused products and shown us how  
16 you get to your reasonable royalty number at each of these  
17 stages?

18 A Yes, I have.

19 MR. BEENEY: And can we turn to the slide 42,  
20 please?

21 BY MR. BEENEY:

22 Q And would you explain to us what this shows,  
23 Dr. Sullivan?

24 A Yes. In my view, this is informative, granted I like  
25 math. But the first row here, the yellow row, is the

Ryan Sullivan - Direct

1760

1 accused product revenue of approximately \$18.5 billion.  
2 The next row, the red malware detection, as I indicated,  
3 the average factor there is 73.6 percent. Applying  
4 73.6 percent to 18 and a half billion provides  
5 \$13,625,526,217.

6 Within that, I apply the apportionment to SONAR  
7 of 23.6 percent in purple. And when I apply the  
8 23.6 percent to the 13.6 billion, that yields  
9 \$3,217,825,280. And that amount is approximately  
10 17.4 percent of the overall revenue.

11 Next step, for the patented invention, I apply  
12 35 percent apportionment. That provides then revenue  
13 attributable to the patented invention of \$1,126,238,848.  
14 And that reflects an overall revenue share of 6.1 percent.

15 I then apply the profit margin of 66.7 percent,  
16 and that indicates that Norton's profit that they actually  
17 realize that's attributable to the patented invention is  
18 \$751,254,925, which is 4.1 percent of overall accused  
19 product revenue.

20 And to calculate the royalty, then Columbia's  
21 contribution of 30.2 percent is applied to that profit,  
22 and that provides an amount of \$227,169,402, which is the  
23 royalty rate of 1.23 percent of overall accused product  
24 revenue.

25 Q So, Dr. Sullivan, we may get to this, but I think

Ryan Sullivan - Direct

1761

1 with slide 42, perhaps it bears noting. Do I correctly  
2 understand this, that should the jury find infringement  
3 and award Columbia 1.23 percent, or the 227,169,402, that  
4 nevertheless, even after Norton's payment to Columbia,  
5 Norton would still retain, as a result of the value  
6 contributed by the '115 and the '322 patents, more than  
7 \$751 million in pure profit?

8 A Close. So Norton actually did realize \$751 million  
9 worth of profit attributable to this patented technology.  
10 If they make a payment overall of \$227 million to  
11 Columbia, that leaves Norton with \$524 million of profit.

12 So even after paying the 227 million, they are  
13 still better off by having used the technology and made  
14 the payment to roughly over \$500 million.

15 Q So to determine the profit that Norton would still  
16 keep after the payment Columbia is seeking in this case,  
17 you'd take the 751 and subtract the 227 payment to  
18 Columbia?

19 A That's right.

20 Q Okay. Let's turn to slide 43. And again, I think we  
21 took a quick look at this before we started down the  
22 journey of how you get here, but again, just quickly tell  
23 the jury what this is, please.

24 A So this is the calculation of reasonable royalties of  
25 sales to customers worldwide such that \$18.5 billion

Ryan Sullivan - Direct

1762

1 multiplied by the royalty rate of 1.23 percent yields the  
2 reasonable royalty of \$227 million. And this applies for  
3 both the '322 patent and the '115 patent collectively,  
4 together.

5 Q And so we can unpack this, Dr. Sullivan, did I then  
6 ask you to unpack it by patent?

7 A Yes.

8 Q So let's take a look at the next slide.

9 A In the --

10 Q I'm sorry. Tell us what that is.

11 A In the event that only the '322 patent is found to be  
12 infringed, then there's a difference in time period  
13 because the '322 patent does not issue until  
14 December 2013. Thus, the sales base is smaller, and it is  
15 \$14,192,309,441. The royalty rate is slightly different.  
16 It is 1.21 percent. And that difference is because  
17 there's a bit of a difference in the product mix, given  
18 the difference in time period. Applying the 1.21 percent  
19 then provides, or yields, a reasonable royalty for the  
20 '322 patent only of \$171,938,941.

21 Q And, Dr. Sullivan, did I ask you to do a further  
22 breakdown just so that we can see how you actually build  
23 up to your opinion?

24 A Yes.

25 Q And let's take a look at slide 45, please, and tell

Ryan Sullivan - Direct

1763

1 us what this is, please.

2 A As I noted earlier, sales to customers located in the  
3 United States is roughly half of the total worldwide  
4 sales. So I've performed a royalty calculation for sales  
5 to customers in the United States only, and that's shown  
6 here on this slide.

7 For the '322 and '115 patents, the sales base is  
8 \$9,110,477,753. The royalty rate is 1.18 percent. Again,  
9 that's slightly different due to the different product  
10 mix. That provides a royalty amount of \$107,535,615.

11 For the '322 patent only, which is a shorter  
12 period of time, the sales base for customers located in  
13 the United States only is \$7,013,287,674, with an  
14 applicable royalty rate of 1.17 percent, and that yields a  
15 royalty amount of \$81,807,500.

16 Q Thank you for doing that.

17 And let's move to slide 47, and what does this  
18 show us, Dr. Sullivan?

19 A This, again, is reflecting why, in my view, the  
20 reasonable -- the royalty that I've calculated is, indeed,  
21 reasonable. Again, here, the blue pie is profit in total  
22 that is attributable to the patented technology separate  
23 and apart from other features and functionalities.

24 The royalty of \$227 million still provides a  
25 profit to Norton and Symantec of \$524 million. So when

Ryan Sullivan - Direct

1764

1 they are sitting at the hypothetical negotiation in  
2 determining whether to enter into this agreement, it would  
3 be economically appropriate and Symantec would be  
4 incentivized to do so because of the additional profit  
5 that utilizing the technology would provide while also  
6 still providing a reasonable payment to Columbia for the  
7 rights to use that technology.

8 Q And, Dr. Sullivan, does the Norton profit of  
9 \$524 million reflect its profit for the accused product as  
10 a whole?

11 A No. Not even close. This is for the profit that is  
12 specifically attributable to the patented invention.

13 Q And let's go back to slide 46, and tell us what this  
14 shows, please.

15 A This is just a graphical depiction indicating that of  
16 the total revenue for the accused products reflected here  
17 in yellow, that the royalty rate, and thus, the royalty,  
18 is a relatively small sliver of those overall revenues at  
19 1.23 percent.

20 Q And, Dr. Sullivan, is this circle in the little pie  
21 sliver, you know, in scale?

22 A Yes.

23 Q All right. So to conclude on the infringement  
24 portion of the case, if the jury finds that Norton  
25 infringes the '115 and the '322 patents, is it your

Ryan Sullivan - Direct

1765

1 professional and expert opinion that at the hypothetical  
2 negotiation Columbia and Norton would agree to a royalty  
3 rate of 1.23 percent to be applied to Norton's \$18 and a  
4 half billion in sales of accused products, resulting in a  
5 payment from Norton to Columbia for the use of the  
6 Columbia patents over the last 11 years of \$272.2 million?

7 A 227 million.

8 Q Thank you.

9 All right. Let's move on to the second part of  
10 the case, Dr. Sullivan, and I promise you it will be  
11 briefer. I think there was less for you to do here.  
12 Columbia's claim for fraudulent concealment for the steps  
13 that Norton took to patent the '643 decoy invention and  
14 under the claim that that technology actually belonged to  
15 Columbia.

16 In order to determine the damages for this  
17 claim, did you develop a high level understanding of what  
18 Columbia alleges?

19 A Yes.

20 Q And tell us what you understand.

21 MR. BEENEY: Perhaps we can look at slide 48,  
22 please.

23 A Well, at a high level, my understanding is that there  
24 was fraudulent concealment that was conducted under the  
25 allegations by Symantec, and that related to the

Ryan Sullivan - Direct

1766

1 application, and that became the '643 patent, that  
2 technology involving decoy technology used with DLP  
3 products, data loss prevention.

4           And what actually occurred -- I have actual here  
5 in red on this particular slide -- is that Columbia, in  
6 the actual world, what actually happened is that they did  
7 not have any ownership of the '643 patent, and in this  
8 actual world, Norton and Symantec had sole or only  
9 ownership of the '643 patent. And in the absence of the  
10 fraudulent concealment, as alleged as a matter of  
11 economics, this would be different.

12 BY MR. BEENEY:

13 Q       And going over to slide 49, explain to us how it  
14 would be different if the alleged fraudulent concealment  
15 had not occurred.

16 A       I've labeled this in blue with the term "but for."  
17 And this is a term that economists use to explain what  
18 would have occurred but for the conduct, but for the  
19 issue. And in this case, it is but for the fraudulent  
20 concealment.

21           And in the absence of that fraudulent  
22 concealment, then as a matter of economics, Columbia would  
23 have had either sole or joint ownership of this patent  
24 while Norton would have either no ownership or joint  
25 ownership with Columbia of the '643 patent.

Ryan Sullivan - Direct

1767

1 Q And the '643, as things stand right now, is owned by  
2 Norton. Is your analysis position of putting Columbia  
3 back in the position it would have been in but for  
4 Norton's conduct dependent on Norton's use of the '643 or  
5 infringement or the hypothetical negotiation that we  
6 talked about in the infringement part of the case?

7 A No. No. And no. This is reflecting ownership. In  
8 this -- for calculating damages for this part of the case,  
9 it is not considered a hypothetical negotiation. There is  
10 not an assumption of infringement or use by Norton or  
11 Symantec. Rather, a fundamental nature of a patent is the  
12 right to exclude, the right to exclude others from using  
13 technology.

14 And by having ownership over the '643 patent,  
15 this provided Norton and Symantec with an ability to  
16 exclude, if they so chose, others from using the  
17 technology. It also allows them to use it too, but allows  
18 them to exclude others, yet in the but for world where  
19 there would not have been the fraudulent concealment and  
20 where Norton would not have had sole ownership of the  
21 technology in the patented technology, then they would not  
22 have been able to exclude others from using that  
23 technology.

24 So then the question becomes what is a  
25 reasonable amount that Norton, and at the time Symantec,

Ryan Sullivan - Direct

1768

1 would pay to Columbia to be able to have those sole  
2 rights. So if we're looking at the bottom row of this  
3 table, it's the difference between having no rights or  
4 joint ownership versus having sole ownership that would  
5 enable them to exclude others from using this technology.

6 Q And does your slide 50 basically show us what you  
7 just explained?

8 MR. BEENEY: If we can move to slide 50, please.

9 A Yes. So the -- the measure of damages, the amount of  
10 damages is the lost value of ownership, and it's the  
11 amount that Norton, Symantec at the time, would have paid  
12 Columbia back in April 2011 for sole ownership of the '643  
13 patent.

14 BY MR. BEENEY:

15 Q And as with your analysis of infringement, did you  
16 rely at least in part on Norton's own business records to  
17 make this determination?

18 A Yes, I did.

19 Q So did you come to learn in your review of Norton's  
20 business records why Norton went to the steps that it did  
21 to obtain the '643 patent?

22 A Yes.

23 MR. BEENEY: Can we turn to the next slide,  
24 please?

25 BY MR. BEENEY:

Ryan Sullivan - Direct

1769

1 Q And tell us what this is, Dr. Sullivan.

2 A This is an e-mail from Marc Dacier of Symantec dated  
3 March 31st, 2011, which is just a few days before they  
4 filed the application that gives rise to the '643 patent.

5 In here, he indicates that -- and I have this  
6 highlighted that, "It is a defensive patent to protect our  
7 DLP technology from competitors who would like to  
8 integrate the same concept into theirs."

9 And what this is reflecting is, as I noted, a  
10 fundamental nature of a patent is the right to exclude and  
11 to exclude others. And this demonstrates that Symantec  
12 was wanting to protect their data loss prevention product  
13 and the sales and profits associated with that product  
14 from competitive pressures from others who could otherwise  
15 be able to implement this concept, technology concept into  
16 their products.

17 MR. BEENEY: And slide 51 refers to PX-461.

18 BY MR. BEENEY:

19 Q So, Dr. Sullivan, with your understanding from  
20 Dr. Dacier as to why --

21 THE COURT: Can everybody hear? Yeah, everybody  
22 can hear? No? Not really?

23 So I do think, Mr. Beeney, you're going to have  
24 to step closer to the microphone.

25 MR. BEENEY: Sorry.

Ryan Sullivan - Direct

1770

1 THE COURT: That's okay.

2 BY MR. BEENEY:

3 Q So, Dr. Sullivan, with your understanding of why  
4 Norton's Dr. Dacier -- as Dr. Dacier explained why Norton  
5 wanted the '643 patent, how do you go about putting a  
6 dollar value on what Columbia lost as a result of at least  
7 its claim that Norton took what really belonged to  
8 Columbia?

9 A I used what is called the income approach whereby I  
10 utilize a reference that I will show you of value for this  
11 type of technology as applied to the data loss prevention  
12 product across time to be able to determine what would be  
13 a reasonable amount that Symantec and Norton would have  
14 paid in 2011.

15 Q And did you have something to look at that you think  
16 as an economist was reasonable to rely on to answer the  
17 question of if Norton wanted to use this technology  
18 defensively to protect its own products, what it would  
19 have paid Columbia instead of taking the technology from  
20 Columbia?

21 A Yes.

22 Q Let's take a look at slide 52, please, and what is  
23 this?

24 A This is reflecting an agreement that was a patent  
25 license that was entered into in 2011 -- so around the

Ryan Sullivan - Direct

1771

1 same time period -- between Columbia and a company known  
2 as Allure. The technology underlying this agreement was  
3 similar in nature involving decoy technology, as I  
4 reviewed it and as explained to me in my interviews with  
5 Dr. Cole.

6 And it provides exclusive rights to the  
7 technology and thus, the right to exclude others. And  
8 that is exactly the type of right that Norton and Symantec  
9 would have had and did have that they did not pay for.

10 MR. BEENEY: And slide 52 refers to PX-62.

11 BY MR. BEENEY:

12 Q Dr. Sullivan, was there a particular part of the  
13 Allure license agreement, PX-62, that you relied on?

14 A Yes. The royalty rates that are specified in that  
15 agreement.

16 Q And let's look at that on slide 53, please. Tell us  
17 what this says to you, Dr. Sullivan.

18 A There are two rates, royalty rates that are specified  
19 in this agreement. There is a lower rate of 2.5 percent  
20 for a patent application. That means for the period of  
21 time for -- while the technology is licensed is just a  
22 patent application, the royalty rate that applies is  
23 2.5 percent. Then, after the patent issues, it becomes  
24 4 percent.

25 So the royalty rate, then, at that point in time

Ryan Sullivan - Direct

1772

1 that applies from that point forward is 4 percent. And  
2 this reflects the basic point that oftentimes the value  
3 and thus, the royalty rate associated with an issued  
4 patent is higher than just a patent application.

5 And I referred to this point a while back on the  
6 other part of the case when I was referring to the 2005  
7 offer made by Symantec for the Applications Community  
8 technology at that point in time.

9 Q And, Dr. Sullivan, how did you use the rates in  
10 PX-62, the Allure license agreement, to determine what  
11 Norton should pay Columbia for using Columbia's ideas if  
12 the jury agrees with Columbia's claim that Norton obtained  
13 the rights to the '643 by concealing facts from Columbia?

14 A As noted, Symantec viewed this as a defensive patent  
15 and defensive technology to protect their data loss  
16 prevention product. So I applied these rates to the sales  
17 revenue that was projected for the data loss -- DLP, data  
18 loss prevention, product across time from 2011 up through  
19 when the patent would expire.

20 Q So take a look at slide 54, and would you explain to  
21 us what you did here to determine the revenue to which you  
22 would apply the Allure license royalty rates?

23 A At a high level, this revenue would occur across a  
24 20-year period, from the patent filing up through  
25 expiration of the patent in April of 2031.

Ryan Sullivan - Direct

1773

1           Because it occurs across time, I discount it  
2 using the weighted average cost of capital for Symantec,  
3 which is considered a discount rate, to discount those  
4 revenues across time to what's known as present value.  
5 And the notion is that a dollar received one year from now  
6 is worth less than a dollar received today. A dollar  
7 received ten years from now is worth even less than a  
8 dollar received a year from now, which is less than a  
9 dollar received today.

10           We're all experiencing inflation right now so  
11 that is part of the issue that this reflects, but there's  
12 also the fact that when we look out into the future,  
13 there's more and more uncertainty the further out we look  
14 in terms of what those revenues are going to be and what  
15 that level of revenues will be because the world changes,  
16 markets change.

17           And so the discount rate is used and accepted  
18 from the financial markets to reduce mathematically what  
19 the overall revenue is to present value. And when I do  
20 that -- and these boxes are to scale -- that the present  
21 value of the revenue is \$572,717,514.

22 Q       And so the value you used to apply the Allure rates  
23 is actually less than -- is the word nominal value of the  
24 sales?

25 A       Yes.

Ryan Sullivan - Direct

1774

1 Q Let's go to slide 55, please.

2 THE COURT: Wait a minute. Can I confirm on 54,  
3 present value of revenue of what?

4 THE WITNESS: This is the present value of the  
5 revenue of Symantec's DLP product, the data loss  
6 prevention product, for a 20-year period from 2011 through  
7 2031.

8 I'll make it a little bit more precise in the  
9 text table.

10 THE COURT: All right.

11 BY MR. BEENEY:

12 Q So tell us what slide 55 shows us, Dr. Sullivan.

13 A I'm going to do this in two steps. So I take that  
14 overall amount and I break it into two time periods. As  
15 you'll recall, we have a 2.5 percent rate that applies  
16 while it's a patent application.

17 So this occurs from the filing of the  
18 application on April 4th, 2011, up until when the patent  
19 issued or just prior to. The patent issued October 1 of  
20 2013. So it's an application up until the day before,  
21 September 30th, 2013.

22 During that time, the present value of revenue  
23 is \$45,951,983, to which I apply the patent application  
24 royalty rate of 2.5 percent, and that yields a payment for  
25 that time period of \$1,148,800.

Ryan Sullivan - Direct

1775

1 Q And did you also do a calculation for the period in  
2 which Allure had a license to an actual patent and not  
3 just the application?

4 A Correct. So it is the period of time for which the  
5 '643 patent is an issued patent.

6 Q So let's look at slide 56, please.

7 A So for the period where the '643 patent is an issued  
8 patent, which occurs from October 1, 2013, up through  
9 expiration on April 4th of 2031, the present value of  
10 those revenues is \$526,765,531.

11 And given that I am utilizing the  
12 Columbia-Allure agreement as the reference for the royalty  
13 rates here, then it is an applicable rate of 4 percent  
14 because it's an issued patent, and that yields a payment  
15 amount for that period of \$21,070,621.

16 Q And so, Dr. Sullivan, as an economist, given what  
17 Norton told you about why it wanted the '643 patent and  
18 how it was using the '643 patent, explain to us why, from  
19 an economics point of view, it was appropriate to use  
20 those two Allure royalty rates.

21 A Because Symantec, and thus Norton, viewed this to be  
22 a defensive patent to protect the revenues associated with  
23 their data loss prevention product so that they could have  
24 the opportunity to prevent competitors from implementing a  
25 similar concept into their products.

Ryan Sullivan - Direct

1776

1 Q All right. And so you've calculated what Norton  
2 would have paid for the '643 while it was an application  
3 and separately what they would have paid for the '643 when  
4 it was an issued patent. And what do you do next?

5 A I add the two together.

6 MR. BEENEY: So let's turn to the next slide.

7 Thank you.

8 BY MR. BEENEY:

9 Q And tell us what this is, Dr. Sullivan.

10 A So I added the \$1.1 million payment to the  
11 \$21 million payment so that in total, it would be a  
12 payment that would have been made by Symantec to Columbia  
13 in 2011 of \$22,219,421.

14 And as you can see, I've also shown here that  
15 the present value of revenue for those two time periods  
16 adds up to the \$572.7 million figure that I provided a few  
17 moments ago with the different rectangles.

18 Q So, Dr. Sullivan, based on the evidence that you've  
19 seen in this case, is it your professional and expert  
20 opinion that the amount to make Columbia whole as a result  
21 of the alleged Norton conduct would be \$22,219,421?

22 A Yes.

23 Q And this is separate and apart from the infringement  
24 damage analysis of a reasonable royalty?

25 A Correct. The two are separate.

Ryan Sullivan - Direct

1777

1 Q So just to conclude, Dr. Sullivan, are you confident  
2 that the opinions that you have expressed to the jury this  
3 morning in this case are consistent with and in accord  
4 with well established and accepted economic concepts and  
5 your experiences in actual license negotiations?

6 A Absolutely.

7 MR. BEENEY: Thank you, Dr. Sullivan.

8 Thank you, Your Honor.

9 THE COURT: All right. It's probably a good  
10 time, I would think, to break for lunch before cross.

11 And so, ladies and gentlemen of the jury, we  
12 will see you at 1:20, and we will begin with the  
13 cross-examination of Dr. Sullivan.

14 Please remain seated while the jury leaves the  
15 courtroom.

16 (The jury exited the courtroom.)

17 THE COURT: All right. So, Dr. Sullivan, you  
18 will remain under oath when you return. And we have some  
19 matters to take up that would be outside of your presence,  
20 Dr. Sullivan, so can we take a -- how long of a break do  
21 you want before we do that?

22 MR. BEENEY: I leave it to Your Honor.

23 MR. MORIN: I'd leave it to Your Honor also.

24 What I've proposed to our friends to make things  
25 as easy as possible is I'm going to share with him what

Ryan Sullivan - Direct

1778

1 I'm going to share with you at the beginning of the lunch  
2 break, with the understanding that unlike our normal  
3 process, the witness and his crew will be sequestered so  
4 that we can make sure where we have areas of disagreement.

5 I don't think we're going to need terribly long,  
6 given your prior rulings, to address this before we bring  
7 the jury in. In some of them, I may be making my record  
8 to make sure that we have a clear record. I will present  
9 them as briefly as I can reasonably do so. But we will  
10 try to work out what we can, or at least confirm we have  
11 disagreement, so that it can be an efficient process when  
12 we conclude lunch.

13 THE COURT: So do you want me to come back at  
14 1:00? That gives you 20 minutes.

15 MR. MORIN: That would be fine with us,  
16 Your Honor.

17 THE COURT: I mean 20 minutes to argue. That  
18 gives you 40 minutes to be together. I can come back at  
19 1:05.

20 MR. MORIN: Your Honor, I believe, but, you  
21 know, we'll have to see, I believe 1:05 would give us  
22 sufficient time. Of course, that may depend, but I  
23 believe it will give us sufficient time.

24 THE COURT: All right.

25 MR. BEENY: I guess my only question is -- I'm

Ryan Sullivan - Direct

1779

1 not sure if I understood counsel correctly, but it seems  
2 to me that the record can be made outside the presence of  
3 the jury.

4 THE COURT: Oh, yeah.

5 MR. BEENEY: Okay.

6 THE COURT: I think we're all presuming that.

7 That's why we're talking before the jury returns --

8 MR. BEENEY: Okay.

9 THE COURT: -- at 1:20.

10 MR. BEENEY: I just wanted to make sure we were  
11 all on the same page.

12 THE COURT: And if we need extra time, I don't  
13 think the jury will mind too much. I want to get this  
14 right. So I'm sure we'll all aim. I'll see you at 1:05,  
15 but feel free to communicate --

16 MR. BEENEY: Your Honor, if we need less or more  
17 time, we'll communicate with chambers, if that makes  
18 sense.

19 THE COURT: It makes great sense.

20 MR. BEENEY: Okay.

21 THE COURT: All right. Okay.

22 MR. MORIN: Thank you, Your Honor.

23 (Recess taken at 12:22 p.m.)

24 (The trial continues on the next page.)

25

1           (The trial resumes at 1:15 p.m. The jury is  
2 not present.)

3           THE COURT: All right. I understand you all  
4 have discussed something, and I'm here to hear the  
5 upshot.

6           MR. MORIN: May I approach, Your Honor?

7           THE COURT: Please do.

8           MR. MORIN: I have spoken with opposing  
9 counsel about anything that approaches a lower number,  
10 as Your Honor had indicated in her ruling this  
11 morning, the Court's ruling this morning. I have a  
12 few to put on the record and get rulings on, Your  
13 Honor, just for the sake of the record, if that's  
14 okay, Your Honor.

15          THE COURT: All right.

16          MR. MORIN: The first thing is Dr. Sullivan  
17 submitted a 2014 report as well. He relied on  
18 Dr. Cole's 53 to 70 percent range. I was going to  
19 have him divide two numbers in his report to come up  
20 with the weighted average of 57 percent. And then I  
21 was going to inquire that that is, of course, lower by  
22 a quarter, by 25 percent, than his 74 percent number  
23 now. That's the first issue.

24          THE COURT: Okay. You're going to have to  
25 say that slower because apparently you have to say it

1 slower.

2 MR. MORIN: Okay. Your Honor, Dr. Sullivan  
3 had a 2014 report.

4 THE COURT: Right.

5 MR. MORIN: In that report, he adopted  
6 Dr. Cole's level one analysis. That level one  
7 analysis was 53 to 70 percent. The weighted average  
8 of that is 57 percent because of the distribution of  
9 products. We could show that by taking his 2014  
10 report and having him divide two numbers. So we were  
11 proposing to do that.

12 THE COURT: Divide which two numbers?

13 MR. MORIN: It would be dividing the  
14 apportioned amount at that level one by the overall  
15 sales, and that yields 57 percent. And I was going to  
16 have him do that number and point out that compared to  
17 his new weighted number of 74 percent, it is  
18 25 percent lower.

19 THE COURT: All right. I'm sorry. I'm going  
20 to ask you one more question. You're arguing the  
21 apportioned amount, what's the top number?

22 MR. MORIN: Your Honor, it's the percentage  
23 of the product that Dr. Cole and Dr. Sullivan contend  
24 is the value of malware detection relative to the  
25 overall product.

1           And if you're confused, Your Honor, may I for  
2 one more moment?

3           THE COURT:    Sure.

4           MR. MORIN:   The range is 53 to 70 percent.  
5 You heard today Dr. Sullivan testify that the weighted  
6 average for his new number is 74 percent. Do you  
7 remember that 73.6 percent?

8           THE COURT:    Uh-huh.

9           MR. MORIN:   The reason the weighted average  
10 isn't in the middle is because a lot more of one type  
11 of product is sold than the other. So he did a  
12 weighted average for today that he presented to the  
13 jury. I was merely going to present the weighted  
14 average of his 2014 numbers and compare the two.

15          THE COURT:    Okay. It would help me to sort  
16 of look at some of the documents that you're referring  
17 to, but go ahead. It's a bad sign that I can't follow  
18 you, and I've read all this.

19          MR. MORIN:   Of course, there are appendices.  
20 I have a demonstrative I could share with the Court if  
21 you'd like to see.

22          THE COURT:    That would probably help me.  
23 You've shown it to counsel, right?

24          MR. MORIN:   I wasn't going to use the  
25 demonstrative. It's more to show you what the math

1 is. I was going to use his reports in light of what  
2 you said about demonstratives, but on attachment F-1,  
3 he says, Here's the apportioned amount in 2014.

4 And underneath is the --

5 THE COURT: Apportioned amount of?

6 MR. MORIN: Malware as related to the overall  
7 product.

8 THE COURT: Okay.

9 MR. MORIN: And below the line, the  
10 denominator is overall revenue in 2014.

11 THE COURT: Okay.

12 MR. MORIN: And the percentage and the  
13 weighted average ends up being 57 percent. I was  
14 going to show him that math and confirm that that is a  
15 quarter lower than his 74 percent.

16 THE COURT: Okay. All right.

17 MR. MORIN: We have the appendices if you'd  
18 like to see it.

19 THE COURT: No. I'm sure that this comes  
20 from you.

21 MR. MORIN: Thank you.

22 THE COURT: I didn't mean to cut you off.

23 MR. MORIN: Of course.

24 THE COURT: All right, Mr. Beeney.

25 MR. BEENEY: Your Honor, just for the record,

1 with respect to Mr. Morin's preamble, we do not object  
2 to anything that leads to a lower number. So that's  
3 point No. 1.

4 Point No. 2, 3, and 4 is that there are  
5 really three objections to this one category. And  
6 I'll state the first principle, Your Honor, because I  
7 think it applies to all of these, which is the  
8 principle that I tried to articulate this morning,  
9 which is counsel cannot be the person providing the  
10 expert theory that makes a mathematical exercise  
11 relevant.

12 In the context of this case, they have  
13 nothing to tie up that it is appropriate to reach any  
14 legitimate conclusion as an evidentiary matter to  
15 combining and doing a mathematical exercise of  
16 numbers.

17 Now, in the context of this particular issue,  
18 there are two other objections. One goes back to  
19 Dr. Cole with his apples and oranges issue, which is,  
20 again, exactly what I think, as I understand it,  
21 counsel is proposing to use a calculation that was  
22 made when Dr. Cole was asked to give an opinion  
23 between 0 and 70 in that first step of the allocation  
24 process to the exercise when both Dr. Cole and  
25 Dr. Sullivan are being asked "what's your opinion"

1 without boundaries to it.

2           So it is mixing a number that came from a  
3 different exercise to suggest to the jury that this  
4 was an opinion similar to what's the right number. It  
5 was not. It was an opinion based on an exercise of  
6 what is the right number between 0 and 70.

7           And that was Dr. Cole's pitch about apples  
8 and oranges. You can't take -- if a client comes to  
9 me and says, "What's the right number between 0 and  
10 70?" you can't suggest that 70 is the right number  
11 when the client comes to me and says, "What's the  
12 right number between 0 and 100?" and I go slightly  
13 above 70. You can't use one for one exercise and one  
14 for the other.

15           And then the third objection, Your Honor, and  
16 I can articulate these hopefully better if I'm not  
17 being articulate, but the other is that counsel has  
18 the math wrong, which is another reason for not doing  
19 these kinds of exercises. I think the difference is  
20 17 percent, not 24 percent.

21           But, primarily, what we object to is asking  
22 this witness, who would not agree to -- or may not  
23 agree to the principle that when you combine these  
24 numbers, any economic expert would do that, and then  
25 asking him to do the math. That just makes no sense.

1 It's not evidence. It's prejudicial, et cetera, et  
2 cetera.

3 And then the second thing is the thing that  
4 Dr. Cole was trying to explain to the jury, which I  
5 think Your Honor really has already excluded, which is  
6 this idea of saying to an expert, Let's take your  
7 70 percent, and thereby it seems to me, and without  
8 casting aspersions, I'm suggesting to the jury that  
9 that's your number when you're doing the exercise that  
10 you're doing now, which is what's the number between 0  
11 and 100 when that 70 came from the request to do an  
12 exercise between 0 and 70. And so I hope that's  
13 clear, Your Honor.

14 THE COURT: Yes.

15 MR. BEENEY: Thank you.

16 MR. MORIN: If may briefly respond, Your  
17 Honor.

18 THE COURT: Uh-huh.

19 MR. MORIN: To start with the last point on  
20 the math, it's 17 percent lower of 74 percent which is  
21 nearly a quarter. Of course, by similar example, if  
22 you started at 50 percent and went to 25 percent,  
23 you'd be half less. It's just that math. So I was  
24 representing math accurately, Your Honor, just for the  
25 record.

1           On the point of the other -- that he was  
2 asked to do one assignment one time and one assignment  
3 the other, I think we established during the  
4 cross-examination, and I'd invite counsel to show me  
5 where I'm wrong, that nowhere in the 2014 report does  
6 it say, "I was constrained. I was asked to do this."  
7 Rather he says, "Here's how I came up with my number,"  
8 and used Nachenberg as a floor and explained why.

9           That's for the record. I don't want to  
10 belabor the point, but I need to make the record clear  
11 that none of that is reflected in the report, and I  
12 think that's fair cross-examination.

13           To get to this immediate issue, Dr. Sullivan  
14 explained to this jury that if you did a weighted  
15 average of his 2019 numbers, it would be 74 percent.  
16 I would be only asking him and making two points, that  
17 if you did a weighted average of your 2014 report, you  
18 would end up with 57 percent, which is -- I can phrase  
19 it however Your Honor would like -- is 17 points lower  
20 or nearly 25 percent lower. So that's the only point  
21 I was looking to make, Your Honor.

22           MR. BEENEY: I would only be repeating  
23 myself, Your Honor, but I think the one thing I would  
24 add is I do believe -- sorry. Thank you.

25           I don't want to take the Court's time in

1 repeating what I just said, but I will add the  
2 following, which is, I do think Dr. Cole did say that  
3 the nature of his assignment was repeated in the  
4 report. I can't -- I don't -- I think if I'm  
5 recalling his testimony, it was "I did not say counsel  
6 told me to pick a number no higher than 70 because of  
7 Mr. Nachenberg's testimony," but I believe Dr. Cole's  
8 testimony was, "It's in the report that I was  
9 constrained to that 70 number." So that's the only  
10 thing I'd add, Your Honor.

11 THE COURT: Do we know if Dr. Sullivan says  
12 it one way or the other?

13 MR. BEENEY: Dr. Sullivan, by taking  
14 Dr. Cole's, imports it.

15 THE COURT: Right.

16 Okay. So I'm going to have to disallow the  
17 calculation largely for the reasons I did in the  
18 opinion I issued today. It is the case that we heard  
19 testimony all day yesterday saying that this is not a  
20 fair comparison, the 70 percent in 2014 versus the  
21 whatever you think is the appropriate percent of 100  
22 in 2019. And I agree that that is not an apples to  
23 apples comparison.

24 And I think it is fair to ask, Were you given  
25 different tasks? because he probably was. But then to

1 try to compare an actual number from one place to  
2 another, I think it is unduly confusing, and it hits  
3 the wrong -- just let me rule before you stand up.  
4 Are you going on to the next one?

5 MR. MORIN: I was trying to be efficient,  
6 Your Honor. I'll stay right here.

7 THE COURT: Okay. I thought you were coming  
8 to argue against me.

9 MR. MORIN: No, Your Honor.

10 THE COURT: Okay. Not that I'm defensive.

11 Okay. So, largely for the reasons that I  
12 said earlier, I don't think it's a fair comparison,  
13 and especially when you start talking about  
14 70 percent of 24 percent. It is just way too  
15 confusing when you're talking about two different sets  
16 of data. So it will be excluded. My apologies. You  
17 can approach.

18 MR. MORIN: May I approach now, Your Honor?

19 Thank you, Your Honor.

20 THE COURT: Uh-huh.

21 MR. MORIN: The next one may not even need a  
22 response. I'm putting some things on the record. I  
23 was next going to ask, we are going to get into the  
24 idea, Your Honor, of price discrimination  
25 qualitatively, meaning charging more in the higher

1    priced products.    So I will ask some questions about  
2    that.    But I was also planning to point out that if  
3    you used his number for Norton AntiVirus, which is the  
4    lower-priced product, across the board, that the  
5    overall damages would drop in the neighborhood of  
6    \$35 million.

7            And I could take Your Honor's ruling if -- of  
8    course, he could respond.    But in view of -- let me  
9    phrase it differently.    In view of Your Honor's  
10   decision and your guidance tonight, am I correct that  
11   you would prohibit such testimony?

12            THE COURT:    Well, I don't understand what the  
13   basis for 800 doing that would be.

14            MR. MORIN:    Sure.    So let me explain it, Your  
15   Honor.

16            We saw yesterday, or Tuesday, that there's a  
17   40-dollar product that he attributes 90 percent of the  
18   value to.    I can't believe I'm bringing this up again.  
19   But he adds \$36 of value to that product.    And we had  
20   testimony from him -- not objected to, I think  
21   everyone's okay with.    But for the 80-dollar product,  
22   because he uses the 70 percent, he attributes \$56 to  
23   that same functionality.

24            I'm going to talk about that a little bit,  
25   Your Honor.    But I take it that you would not allow me

1 to then say, if we applied \$36 across all of the  
2 products, that it would drop the damages amount by  
3 \$35 million.

4 THE COURT: I don't understand how you think  
5 that that's a valuable comparison. So I think I'm  
6 saying no, but you have to tell me why you think it's  
7 a valuable comparison.

8 MR. MORIN: It's a valuable comparison, Your  
9 Honor, because we have -- let's take two examples,  
10 Your Honor, a 40-dollar baseline product and an  
11 80-dollar 360 product. The 40-dollar baseline product  
12 he's attributing \$36 to. The 80-dollar product he's  
13 attributing \$56 to. I'm going to cross-examine  
14 Dr. Sullivan on that qualitatively, but I would like  
15 to wrap it up with the point that if the jury were to  
16 ascribe \$36 across all of the products, then that  
17 would drop the damages total of his by \$35 million.

18 THE COURT: So I'm pretty sure that that  
19 presumes that the only product that is infringed is  
20 the Norton AntiVirus.

21 MR. MORIN: It presumes, Your Honor --  
22 without saying the number, let's say there are four  
23 components in Norton AntiVirus and one of them is  
24 infringing. Let's -- when you go to the bigger  
25 product, there are eight components, and it's still

1 only one of the eight. The argument I would be making  
2 is they should receive -- I would make this argument  
3 anyway that they should receive the same value level,  
4 cross-examine him on that point. And the next point I  
5 was going to make is, if 800 give them all the same  
6 value, that \$36, his overall number would drop by  
7 \$35 million.

8 THE COURT: I'm not seeing how 800 give them  
9 the same value. I may be just running 800 in circles,  
10 but in what possible world would they have the same  
11 value? Because -- go ahead.

12 MR. MORIN: Please. I didn't mean to  
13 interrupt.

14 THE COURT: No, go ahead.

15 MR. MORIN: Dr. Sullivan, I was going to  
16 cross-examine him, and I am probably qualitatively,  
17 about testimony he gave, for example, in the *Techcet*  
18 *vs. Adobe* case which was also in this court, in  
19 Alexandria.

20 Your Honor may be familiar with Adobe  
21 Acrobat. There is, for example, a product that's  
22 called Acrobat Standard and one that's called Acrobat  
23 Pro. And in that case, one sold for 12.99 and one  
24 sold for 14.99. And he testified there that the  
25 additional price does not and cannot be attributed to

1 the patented feature because it's in both products.  
2 And if 800 applied the same analysis here, you could  
3 make no part of that extra \$40 and say that that was  
4 due to the accused feature, which would mean in all  
5 the products, it's worth \$36, which drops his overall  
6 number by \$35 million. That was the point I was going  
7 to make.

8 THE COURT: All right. I'll hear from the  
9 other side.

10 MR. MORIN: Thank you.

11 MR. BEENEY: Your Honor, I think there are  
12 basically two things wrong with this. In the context,  
13 what's being argued, Your Honor, is Federal Circuit  
14 smallest saleable patent practicing unit law. And  
15 what I believe is being suggested is is that  
16 Dr. Sullivan be used to do a calculation of applying a  
17 royalty across all Norton products regardless of what  
18 their sales price was under the theory that the lowest  
19 priced Norton product is the smallest saleable patent  
20 practicing unit.

21 So two things wrong with that at least. One  
22 is that SONAR/BASH is what's accused of infringement,  
23 and there is no smallest saleable patent practicing  
24 unit in this case. I think perhaps more  
25 significantly, in docket 737, on February 24, Your

1 Honor already rejected the argument, and if you'll  
2 forgive me, completely consistent with Federal Circuit  
3 law, that you need not do that.

4 And then finally, you know, I apologize for  
5 repeating myself, but certainly the cross-examination  
6 is fine until 800 get to that calculation. There is  
7 no witness who's going to say that it is appropriate  
8 to use the lowest priced Norton product across the  
9 entire product line. And, in fact, Dr. Cole and  
10 Dr. Sullivan will say exactly the opposite based on  
11 their reports. And so it is inappropriate for counsel  
12 to then do the calculation, thereby providing  
13 counsel's theory about how you would do a reasonable  
14 royalty calculation using the lowest priced product  
15 across the entire product line.

16 These witnesses say that's not appropriate.  
17 And so it's not appropriate for counsel to ask them  
18 what the math is for a theory that is only counsel's.

19 THE COURT: Did you want to respond?

20 MR. MORIN: May I approach, Your Honor?

21 THE COURT: Uh-huh.

22 MR. MORIN: Just so the record is clear, in  
23 terms of the testimony that I will elicit,  
24 Dr. Sullivan will agree that the SONAR/BASH component,  
25 which is, of course, the issue here, is the same in

1 all the products. So that when we're looking at the  
2 valuation, it is the same accused functionality.

3 I believe in Your Honor's order, you said  
4 also that -- the order that Mr. Beeney is referring  
5 to -- that you're not required to look at the smallest  
6 saleable unit. I wasn't aware, and I don't think Your  
7 Honor said it's improper to even look at the smallest  
8 saleable unit. But that's all I'll say.

9 THE COURT: It would be improper for 800 to  
10 look at it when no other expert adopts it. So the  
11 part of the argument that has weight is that if no  
12 expert is saying anything about that particular  
13 theory, you cannot introduce math based on that  
14 theory. And so it is totally improper because there  
15 is no factual predicate, and it's inadmissible for 800  
16 to introduce it. If 800 had somebody else who might,  
17 maybe.

18 And whether or not -- I mean, I'd have to  
19 look. Of course, in some possible world, you can  
20 always use that type of royalty analysis. I'd be a  
21 little surprised -- I have to look at my own ruling --  
22 if I said you can never do it because, of course, you  
23 can. I honestly can't remember if I said you can't do  
24 it in this case, because there is evidence in this  
25 case about whether or not the accused products can

1 work without SONAR/BASH, right? So it's not really a  
2 saleable unit, right? It's part of the bigger part.

3 And so I don't think that that analogy works  
4 perfectly. Even though it is the same throughout all  
5 of them, I don't have anything on the record that  
6 suggests that you can take SONAR/BASH -- it's somewhat  
7 disputed -- take SONAR/BASH out and still use Norton's  
8 products in the same way.

9 So I don't know how you would get that theory  
10 in. I suppose you're allowed to try to get  
11 Dr. Sullivan to adopt it. And if he does, then he  
12 opens the door. And if he doesn't, then you have to  
13 stop.

14 MR. MORIN: Understood, Your Honor. I was  
15 cutting to the chase at the beginning because I think  
16 not asking him the math appears consistent with Your  
17 Honor's ruling of this morning.

18 THE COURT: Right.

19 MR. MORIN: So I was just putting it on the  
20 record, which is --

21 THE COURT: Right. I'm engaging 800 so you  
22 have a full record.

23 MR. MORIN: Thank you, Your Honor. So I'm  
24 not permitted to do the math?

25 THE COURT: Correct.

1 MR. MORIN: Thank you.

2 MR. BEENEY: I'm sorry. Your Honor, just to  
3 clarify, I don't believe Your Honor's *Daubert* ruling  
4 said 800 may not do that. I think Your Honor's  
5 *Daubert* ruling analyzed that law and said we were not  
6 required to do that. So I just wanted to make sure  
7 that I didn't misrepresent --

8 THE COURT: Right. That's what I presumed I  
9 said, because, of course, you can do it in some  
10 worlds, but the challenge was whether or not he was --  
11 it was an improper opinion because he had not. And  
12 the answer was: That is not improper. So you can't  
13 introduce the theory if he does not adopt it.

14 MR. MORIN: Understood, Your Honor. And he  
15 hasn't adopted it. So I'm not going to do the math.  
16 And in fairness to Mr. Beeney, I don't think he  
17 suggested otherwise either.

18 THE COURT: No, I don't think he did, nor did  
19 800 say otherwise.

20 MR. MORIN: What's that?

21 THE COURT: Nor did you say otherwise.  
22 Neither of you were scoring points.

23 MR. MORIN: Okay. I think we're on the same  
24 page there.

25 The next one is one that I think also falls

1 under Your Honor's ruling this morning likely, but I  
2 just wanted to put it on the record and maybe confirm  
3 that I would not be allowed to do this in view of Your  
4 Honor's ruling this morning.

5 At the level five, Your Honor, Dr. Sullivan  
6 takes Norton's -- you saw this -- R&D expenses and  
7 divides them into the sum total of Norton's R&D plus  
8 sales and marketing expenses. That was the 30 percent  
9 we saw this morning.

10 THE COURT: Uh-huh.

11 MR. MORIN: I was going to, if permitted, go  
12 to the specific functionality of SONAR/BASH.  
13 Dr. Sullivan says there was 600,000 a year for six  
14 years in R&D expenses for SONAR/BASH. That's in his  
15 report. I was going to take the overall sales and  
16 marketing for the product group of \$511 million, use  
17 his apportionment and Dr. Cole's that SONAR/BASH  
18 machine-learning is worth 6.1 percent, and that would  
19 yield \$23 million for the record. And I was going to  
20 do the math and show that that yields a relative  
21 contribution of 1.8 percent.

22 I will acknowledge to the Court that we have  
23 no expert who did that math or offered that, and I  
24 just wanted to confirm with Your Honor that the way I  
25 read your ruling I will not be allowed to do that.

1 THE COURT: 800 cannot do that to the extent  
2 that 800 can't get Dr. Sullivan to adopt it.

3 MR. MORIN: For the record, rather than waste  
4 the jury's time, I think it's quite certain he won't  
5 adopt the 1.8 percent rather than 30. So with Your  
6 Honor's blessing, I'd rather not waste the jury's time  
7 on that if that's okay with Your Honor.

8 THE COURT: That is totally your call, and  
9 you've preserved your issue.

10 MR. MORIN: Thank you.

11 One other one that I think may be quick.  
12 During Dr. Herskowitz's cross-examination, Your Honor  
13 ruled before a break that they had opened the door,  
14 and I could ask questions about the \$723,000 total  
15 that all the cyber patents from Columbia have yielded.  
16 And 800 said no. And we did a little bit. And then  
17 800 said that they had opened the door at that time.

18 And Your Honor will recall that I didn't  
19 follow up with that question, and we said we'll carry  
20 it over to Dr. Sullivan and address it at that time.  
21 We said that won't go on for a while.

22 I'm renewing my request. I think my point  
23 was counsel had opened the door with the 600 million.  
24 I know it's been a long time. We're talking about the  
25 600 million in licensing revenue, for example, that

1800

1 Columbia had given to the university. 800 ruled last  
2 Tuesday that it had opened the door for  
3 Dr. Herskowitz's cross-examination on that point. And  
4 I didn't ask the question. I didn't follow up. And  
5 we said we'd talk about it before Dr. Sullivan.

6 Our position would be it was counsel who  
7 opened the door, so it would be fair to ask of this  
8 witness. But I'm just making that request for the  
9 record because Your Honor had said that they had  
10 opened the door, and our point was we thought it was  
11 counsel who had opened the door.

12 THE COURT: Right. Okay. I'll hear a  
13 response to that.

14 MR. BEENEY: In candor, Your Honor, I don't  
15 remember whether Your Honor said that Norton could  
16 talk about the relative number of, you know,  
17 proportion of cyber licensing as opposes to a specific  
18 number based on adding licenses that Your Honor  
19 excluded because they were noncomparable. But I don't  
20 think that it's appropriate to take licenses that are  
21 noncomparable and add them up and say that's the  
22 totality of the cyber licensing. It just creates,  
23 again, kind of a -- to use Dr. Cole's words -- a  
24 mismatch.

25 Nothing Dr. Sullivan said about, you know,

1 Columbia's revenue would allow this to be appropriate  
2 cross examination. This is not their witness. This  
3 is not within the scope of his direct testimony. It  
4 really has nothing to do with what he had to say, and  
5 it's kind of throwing something into Dr. Sullivan's  
6 cross-examination that had nothing to do with his  
7 examination on direct. So for that reason we just  
8 don't think it would be appropriate here.

9 THE COURT: All right. Did you want to  
10 respond?

11 MR. MORIN: I don't need to respond, Your  
12 Honor.

13 THE COURT: All right. Okay. Well, with  
14 respect to that, I did make a finding that  
15 Mr. Herskowitz's testimony did open the door with  
16 respect to some of the cross-examination of him. And  
17 I can't make the finding that that opened it up for  
18 the entire case.

19 There was no cross-examination of him in that  
20 instance. And Dr. Sullivan just doesn't have anything  
21 to say that I think would -- that speaks to that  
22 particular issue in a way that opens the door today.  
23 So I'm going to exclude that line of questioning. And  
24 obviously 800 preserve that also.

25 MR. MORIN: Thank you, Your Honor. May I

1 approach for the last one?

2 THE COURT: Yes.

3 MR. MORIN: May we put something on the  
4 screen, Your Honor?

5 THE COURT: Sure.

6 MR. MORIN: If we could put up Slide No. 26  
7 from the testimony of Dr. Sullivan from his slides.

8 During direct examination, Dr. Sullivan was  
9 asked about some of Dr. Khan's deposition testimony  
10 where 90 percent of Symantec's enterprise customers  
11 visit this executive briefing center.

12 THE COURT: Uh-huh.

13 MR. MORIN: And, Your Honor, there was an  
14 errata sheet that Ms. Khan filed timely with her  
15 deposition, if we could put it up, please. And she  
16 explained -- and Dr. Sullivan acknowledged that this  
17 existed in his reply report. So I was a little  
18 surprised he didn't talk about it. She clarified her  
19 testimony that she didn't mean 90 percent of the  
20 world's enterprise customers visited the executive  
21 briefing center, that she said that she -- what's said  
22 at the bottom there, "I thought I was being on the  
23 first box, asked out of the visitors to the executive  
24 briefing center, how many are enterprise customers, to  
25 which I would answer 90 percent."

1           So there's an errata that I was going to  
2 cross-examine on. It's part of her testimony in  
3 completeness. And, Your Honor, there's a -- Your  
4 Honor has cautioned everybody to be careful in  
5 characterizing testimony. She has an errata sheet  
6 here. And, Your Honor, I think everybody in the room  
7 knows that the errata sheet is correct as well. May I  
8 explain, Your Honor?

9           THE COURT: Sure.

10          MR. MORIN: There are thousands of enterprise  
11 customers in the world; in China and in Australia, a  
12 grocery store in Italy, wherever it might be, Turkey,  
13 Egypt. Of course, 90 percent of the people and the  
14 companies that use Norton software don't go to  
15 California and meet in the briefing center. So her  
16 clarification makes total sense that 90 percent of  
17 their visitors are enterprise users or businesses  
18 rather than 800 and me who might have software in our  
19 individual computers. So I think it's fair  
20 cross-examination to cross with the errata sheet.

21          I understand when we looked at the emails,  
22 that there was a perfunctory one-line email that this  
23 was sent before we were in the case that said, without  
24 explanation, "we object and reserve rights." But  
25 that's the sum total in an email that was said.

1           With the motions in limine and the like that  
2       were filed, if they wanted to try to strike a timely  
3       errata sheet -- that, by the way, it's not really  
4       changing testimony but clarifying it, Your Honor,  
5       because, like I said, it's inconceivable, and I'll  
6       doubt they'll say otherwise, that 90 percent of the  
7       thousands of enterprise customers from all around the  
8       world fly to Culver City to meet with Norton. So we'd  
9       like to cross-examine with the errata sheet.

10           THE COURT: All right. I'll hear argument.

11           MR. BEENEY: Your Honor, if I may, may I pass  
12       up to the Court, just to make it a little easier, the  
13       errata sheet -- excuse me. Columbia's objection to  
14       the errata sheet of Ms. Khan's deposition transcript  
15       and a copy of Judge Cacharis' opinion in *Stradtman*,  
16       S-T-R-A-D-T-M-A-N, vs. *Republic Services*?

17           THE COURT: Do they have all of that?

18           MR. MORIN: Your Honor, we've never seen the  
19       case.

20           MR. BEENEY: We did this at lunchtime, Your  
21       Honor. I'm sorry.

22           THE COURT: Listen, I'm going to take a  
23       seven, 10-minute break so you all have time to read  
24       it. You can give me the case, at the very least,  
25       also, and then you all will be prepared to argue with

1 knowledge.

2 MR. BEENEY: Okay. Thank you.

3 THE COURT: So we'll take a 10-minute break.

4 MR. BEENEY: Your Honor, I don't know if it's  
5 useful, would you like me to respond first of all,  
6 Your Honor?

7 THE COURT: Well, why don't we do that?  
8 You're right. I'm sorry.

9 MR. BEENEY: Thank you. So, Your Honor, I  
10 think my understanding of this, without doing the  
11 research because we just learned about this at lunch,  
12 is that courts actually are split on the question of  
13 whether an errata sheet can be used to make  
14 substantive changes in a witness's testimony. And  
15 were it not for the following facts, I might pass on  
16 this, but I think it's important not to because I  
17 think it's going to create a misleading impression to  
18 the jury.

19 On the errata sheet, Your Honor, there are  
20 three corrections. They are all to the testimony  
21 that, you know, 90 percent of the business customers  
22 visit the site in California. And, again, it is not  
23 illogical because these are the largest customers who  
24 come to visit Norton. So if we're arguing logic, it's  
25 not illogical. But what Ms. Khan, who is a senior

1 executive at Norton, did was to change her testimony  
2 three times in which she swore at her deposition that  
3 the 90 percent was correct, including, you know, I  
4 think the last one, which I think is informative,  
5 where she says, Rather than saying I meant the later,  
6 I meant the former.

7           So she swore to it three times in her  
8 deposition. Then a month later in an unsworn  
9 declaration, she changes the testimony substantively  
10 three times, and I think it would be misleading to ask  
11 Dr. Sullivan, you know, Why didn't 800 apply this one  
12 change to the deposition testimony 800 got given that  
13 Ms. Khan testified to it three separate times.

14           Now, just finally, Your Honor, in the  
15 *Stradtman* decision that we handed up to Your Honor,  
16 which was Judge Cacheris, in 2015, Judge Cacheris  
17 cites at least two other Eastern District cases for  
18 the proposition that "altering deposition testimony to  
19 make substantive changes rather than technical or  
20 typographical changes is an impermissible use of an  
21 errata sheet." And I think Judge Cacheris cites the  
22 *Touchcom* case from the Eastern District, in 2011,  
23 which is on the first page of the opinion, and quotes,  
24 "a deposition is not a take-home examination."

25           And I think that's pretty apt here. This was

1 not an interrogatory. This was a deposition. And to  
2 suggest to Dr. Sullivan that he relied on testimony  
3 that was changed not once, not three times, I think is  
4 inappropriate, particularly at least from the 45  
5 minutes that we looked at it over lunch, that that  
6 does not appear to be the law in this district.

7 Although I do acknowledge that the courts are split on  
8 this, I don't know of a case in which a witness did it  
9 three times. But that's the state of play, I think,  
10 Your Honor.

11 THE COURT: All right.

12 MR. MORIN: Your Honor, may I respond?

13 THE COURT: Sure.

14 MR. MORIN: Your Honor, it may be that we  
15 don't need a break for the *Stradtman* decision. I  
16 think here Your Honor has advised us and admonished us  
17 to make sure we're fair and complete with witness  
18 testimony.

19 I see this as a clarification and a pretty  
20 straightforward one. She was asked, What percentage  
21 of the enterprise customers visit the EBC? She said  
22 in a different place in her transcript she didn't know  
23 one of the times. The three changes are to change one  
24 thing to clarify, but, very reasonably, she was saying  
25 90 percent of the people who come to Culver City are

1 business people rather than the customers.

2 And it is beyond comprehension that  
3 90 percent of the businesses on the planet and the  
4 people using it there are visiting Culver City in this  
5 little executive business center around the world.  
6 It's misleading testimony if not corrected, Your  
7 Honor, and I don't see this -- and it's not a  
8 take-home examination with three consistent changes  
9 that are consistent with what she had in her record.

10 So irrespective of Judge Cacheris' idea that  
11 you shouldn't be able to change "the light is red" to  
12 "the light is green," this is a clarification of what  
13 she meant consistent with the other testimony, like I  
14 said, one time when she said "I don't know," which is  
15 part of the errata sheet. And it's only fair, and I  
16 think the Court can take some aspect of logic or  
17 common sense that with \$9 billion in foreign sales and  
18 20 percent of them, or whatever, being enterprise  
19 users, that all the businesses in Australia who run  
20 Symantec are not visiting the executive research  
21 center. So that would be the point I would make. I  
22 don't think we need a break.

23 THE COURT: I need a break. I'm going to  
24 read the testimony. You all have been studying the  
25 testimony. I'm going to be prepared.

1 MR. MORIN: Of course.

2 THE COURT: And so I'm going to give myself  
3 15 minutes. And you all may exchange whatever 800  
4 wish.

5 MR. MORIN: Thank you, Your Honor.

6 THE COURT: I want to look at the testimony.  
7 And I'm making sure I have it. Do I have her  
8 testimony?

9 MR. BEENEY: Yes, Your Honor, I passed up a  
10 copy of the deposition to you.

11 THE COURT: I just got it. Yes. All right.  
12 Okay. We'll take a brief recess.

13 (Recess taken.)

14 (The trial resumes on the next page.)

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1 (The trial resumed at 2:14 p.m.)

2 (The jury is not present.)

3 THE COURT: Okay. So I have taken our break and  
4 I've taken under consideration the cross-examination  
5 proposed with regard to Ms. Khan's errata sheet. I'm just  
6 going to make some findings in the first instance.

7 It is certainly the law of this district that  
8 one cannot make substantive changes to an errata sheet.  
9 It is to correct -- Judge Cacheris says, "The purpose of  
10 an errata charge is to correct the alleged inaccuracies in  
11 what the deponent said at his or her deposition, not to  
12 modify what the deponent said for tactical reasons or to  
13 reflect what that person wishes that they had said." And  
14 so that is at the Westlaw cite of -- it looks like \*1.

15 And in that case, Judge Cacheris found that a  
16 person who gave a series of equivocal answers to a  
17 question and then afterward changed it to something that  
18 was definitive, that that was a substantive change in  
19 testimony, and he disallowed the errata sheet.

20 With respect to the other two cases that are  
21 in -- that are cited within *Stradtman*, they're not as  
22 relevant. The *Touchcom* case is reported, 790 F.Supp. 2d  
23 435. In that case, it was just -- frankly, I think it's  
24 factually driven. There the deponent was blind, legally  
25 blind and took a deposition and then submitted an errata

1 that said subject to reviewing the relevant documents, and  
2 essentially Judge Cacheris goes through a factual analysis  
3 about whether or not that was tactical. And in the end,  
4 he found it was largely a tactical decision.

5           The third case is from Judge Ellis, and that is  
6 *Lee v. Zom Clarendon, L.P.* This is also reported,  
7 689 F.Supp. 2d 814, and in that case, he doesn't actually  
8 talk about how the errata was used. He makes the finding  
9 that even assuming that the deponent had submitted  
10 appropriate deposition transcript changes, that the errata  
11 sheet makes substantive changes, not technical or  
12 typographical changes to the plaintiff's deposition  
13 testimony. He finds that that is not an appropriate use  
14 of errata sheets, citing a Maryland case that says a  
15 deposition is not a take-home exam, it is for  
16 clarifications and cannot be akin to the student who takes  
17 the exam home to make sure it's right.

18           So here, we have three instances in which  
19 Ms. Khan cites testimony about this 90 percent figure with  
20 respect to visitors in the executive business center.

21           Counsel for Norton is correct that the first  
22 question on page 36 of the deposition says, "So of  
23 enterprise customers who purchase Symantec Endpoint  
24 Protection, 90 percent visit the Executive Briefing Center  
25 in Mountain View, California?"

1 And she says, "Could you repeat the question?"

2 And the question is repeated, and then she asked  
3 for clarification.

4 And the question becomes, "Would you estimate  
5 that approximately 90 percent of the customers who  
6 purchase Symantec Endpoint Protection visit the Mountain  
7 View EBC?"

8 And she says, "I do not know."

9 Noting that that is an enterprise product, I'll  
10 add that.

11 The more, I think, pertinent discussion starts  
12 on page 164 and goes through 166. There are questions  
13 about whether or not one purpose of the EBC meetings is to  
14 sell products and services and that they occur in the  
15 United States.

16 She says, "Yes."

17 Then there's a question about the 90 percent of  
18 Symantec's enterprise customers who visit EBC, Were you  
19 talking about the customer base globally?

20 And she says, "Yes."

21 And the question is, "Is there a different  
22 percentage for foreign versus domestic customers who visit  
23 the EBC?"

24 And she asked for clarification, and then she  
25 says, "You may need to ask one by one, because are you

1 saying that the U.S. number of enterprise customers that  
2 come in versus the global enterprise that come in, are you  
3 asking are both at 90 percent or are we talking about  
4 joint?"

5 And the -- the examiner says, "Correct. So I'm  
6 trying to figure out if we pull apart this joint number,  
7 what is the number or the rate of the domestic enterprise  
8 customers who come to the EBC, and what's the rate of the  
9 foreign customers that come to the EBC?"

10 There's an objection.

11 And the answer is, "Very different numbers."

12 And the question is, "So what is the number for  
13 domestic customers?"

14 And the answer is, "I don't know what the  
15 domestic is and/or foreign is. I know as a global  
16 organization 90 percent of our global organization  
17 enterprise salespeople make a request for a briefing."

18 "And the global enterprise salespeople are the  
19 ones who deal with the global customer accounts, correct?"  
20 is the next question.

21 And she said, "We do have a subset of sales  
22 representatives that deal with global accounts, yes."

23 And then she's asked if those are the largest  
24 enterprise accounts, and she says, "Yes."

25 And the question is, "And they're customers who

1 tend to span the globe, which is why they're called  
2 global?"

3 And she says, "Yes."

4 And the question is, "And you said 90 percent of  
5 those global enterprise customers submit a request?"

6 And the answer is, "90 percent of enterprise  
7 that include global make a request to come into the EBC."

8 And then as to the latter, the question is, "And  
9 when you say 75 to 95 percent enterprise, do you mean of  
10 the briefings that are held at the EBC 75 to 90 percent of  
11 them are enterprise customers, or are you saying that  
12 75 percent to 90 percent of enterprise customers visit the  
13 EBC?"

14 And she says, "The latter," meaning that 75 to  
15 90 percent of the enterprise customers come visit the EBC.

16 Now, I'll say that she certainly is asking for  
17 clarification when these questions are being asked, but  
18 she gets it. And it is the case that -- she doesn't say  
19 that 90 percent of the global customers necessarily come,  
20 but she does say that 90 percent request.

21 And I certainly think that that is -- that is  
22 the testimony, not that 90 percent of the customers who  
23 visit are enterprise customers. I don't think that that's  
24 what this testimony says, and I'm going to make a finding  
25 that this errata sheet is substantive.

1           To the extent there's any question -- I don't  
2 know -- what slide are we looking at? What number?

3           MR. MORIN: Your Honor, slide 26 of  
4 Dr. Sullivan's deck.

5           THE COURT: So I think you can ask Dr. Sullivan  
6 whether he knows that she testified that 90 percent of  
7 global customers asked to visit the EBC. I think that's a  
8 fair cross-examination based on the testimony, but the  
9 errata can't come in. I think it's a substantive change.

10          MR. MORIN: Understood, Your Honor.

11          THE COURT: And let me just say on the record  
12 because I don't think I did, none of these cases have  
13 been -- they don't have flags on them. One has a flag for  
14 where the judge changed his own opinion. The Fourth  
15 Circuit has not cited them, but they are not bad law in  
16 the Fourth Circuit, and they are certainly good law. Two  
17 of them published in the Eastern District of Virginia. So  
18 I'm going to apply the law that they have.

19          MR. MORIN: Yes, Your Honor. And maybe we'll  
20 submit -- we're going to submit some things just to  
21 complete the record. Maybe we'll submit the errata with  
22 just the omnibus documents, say some documents that were  
23 discussed in court, if that's okay.

24          THE COURT: That's fine. You can make whatever  
25 record you want. That's fair.

1 MR. MORIN: Thank you, Your Honor.

2 THE COURT: Okay.

3 Mr. Wigley.

4 All right. Are we prepared to proceed?

5 MR. MORIN: We are, Your Honor.

6 MR. BEENEY: We're bringing in Dr. Sullivan.

7 THE COURT: Okay. Sure.

8 MR. MORIN: Do you want me at the podium,

9 Your Honor? I don't want to --

10 THE COURT: Yes. That way the jury just thinks  
11 we've been sitting here the whole time.

12 All right. Dr. Sullivan, welcome back.

13 THE WITNESS: Thank you.

14 THE COURT: We'll bring the jury in, and we'll  
15 start with cross-examination.

16 THE WITNESS: Very good. Thank you.

17 (The jury entered the courtroom.)

18 THE COURT: All right. Welcome back. I want to  
19 make sure everybody is ready to hear the next evidence.  
20 Everybody ready?

21 Okay. So we'll begin with cross-examination,  
22 and I need to remind you, Dr. Sullivan, that you're still  
23 under oath.

24 THE WITNESS: Understood. Thank you.

25 THE COURT: Thank you.

Ryan Sullivan - Cross

1817

1 MR. MORIN: May I proceed, Your Honor?

2 THE COURT: Please.

3 MR. MORIN: Good afternoon, ladies and

4 gentlemen.

5 **CROSS-EXAMINATION**

6 BY MR. MORIN:

7 Q And good afternoon, Dr. Sullivan. It's nice to see  
8 you.

9 A Good to see you.

10 Q Dr. Sullivan, just so we're all on the same page,  
11 you're an economics expert, correct?

12 A That is right.

13 Q And you, for the purposes of your assignment, assumed  
14 that the '115 patent and the '322 patent were infringed,  
15 right?

16 A That is correct.

17 Q You don't know and don't have an opinion one way or  
18 another about whether Norton actually infringes the '115  
19 or the '322 patent, correct?

20 A That's right.

21 Q And is it fair to say that if there's no finding of  
22 patent infringement, then the damages would be zero?

23 A That would be my understanding --

24 Q Okay.

25 A -- as it relates to the patent infringement.

Ryan Sullivan - Cross

1818

1 Q Fair enough. If there's no finding of patent  
2 infringement by this jury, then the damages would be zero  
3 for patent infringement?

4 A That's my understanding.

5 Q Okay. In your report, you categorize it as five  
6 different families of products that are accused of  
7 infringement in this case. Is that fair?

8 A Yes.

9 Q And just so we're on the same page, there's Norton  
10 AntiVirus, Norton Internet Security, Norton Security,  
11 Norton 360, and Symantec Endpoint Protection?

12 A Correct.

13 Q And each has different features and different price  
14 points?

15 A Yes, generally.

16 Q Okay. The malware detection aspects of each of those  
17 five different families of products is the same, though,  
18 to your understanding, correct?

19 A The apportionment is distinct, yet the malware  
20 functionality, as I understand it, is generally similar.

21 Q Yes. We heard a difference is in apportionment. But  
22 if we were to look at the technology in the product, it's  
23 your understanding that the malware technology is the same  
24 across those five different families of patents?

25 A Products.

Ryan Sullivan - Cross

1819

1 Q Products.

2 A My understanding, there's some variation across time  
3 especially between enterprise and consumers, Symantec  
4 Endpoint, or SEP, versus the Norton line, yet I'm not  
5 addressing those distinctions from a technological  
6 standpoint.

7 Q From an economics standpoint, how you're testifying,  
8 you treated the patented functionality as equivalent  
9 across all the different products?

10 A The patented invention, the green rectangle, in  
11 effect, what's encompassed in there I have treated  
12 similarly. Different magnitudes but similar technology.

13 Q You treat them to be -- the technology to be  
14 equivalent across all the different product lines. Fair?

15 A The technology from the patented invention, yes.

16 Q The same across all the families?

17 A In terms of a functional perspective, yes.

18 Q Okay. And you understand, and because you relied on  
19 it, that Dr. Cole gave different dollar values to malware  
20 detection in different products that use the same accused  
21 technology?

22 A He did a price comparison, as well as a product  
23 comparison. So it wasn't all dollar values, but there are  
24 distinctions on that apportionment.

25 Q Right. For an \$80 Norton 360 product, you applied

Ryan Sullivan - Cross

1820

1 70 percent to malware, which would give you \$56, correct?

2 A That arithmetic is correct, and I believe that is  
3 correct.

4 Q All right. Whereas for a 40-dollar Norton AntiVirus  
5 product, he did a 90 percent apportionment, and you would  
6 have \$36 for what you say technologically is the same,  
7 correct?

8 A That's right. There is one nuance, which is that  
9 those are prices, not necessarily revenue, and there can  
10 be a bit of a distinction. So to the extent that there  
11 are any variations in pricing across customers, I have  
12 captured that in the revenue data.

13 Q Right. But if we were to assume, for example, that a  
14 Norton AntiVirus product sold at its list price of \$40 and  
15 a Norton 360 product sold at its list price of \$80, he  
16 would give \$56 of value to malware for the higher priced  
17 product and \$36 of value to malware for the lower priced  
18 product, correct?

19 A If those are, indeed, the selling prices, yes.

20 Q Right. And that sounds about right on the selling  
21 prices, right?

22 A Those are -- there are distinctions on the selling  
23 prices in terms of what Symantec and Norton actually  
24 receives. Occasionally there's discounts or coupons or  
25 things of that nature.

Ryan Sullivan - Cross

1821

1 Q All right. But is that the ballpark, about 20 bucks  
2 more?

3 A The 36 versus 56, yes.

4 Q All right. And you've opined in software patent  
5 cases in the past?

6 A I have.

7 Q Including in this court in the Eastern District of  
8 Virginia?

9 A Yes.

10 Q And one of those cases was the *Tecsec v. Adobe* case?

11 A That's right.

12 Q And in that case, there were two versions of Adobe at  
13 issue. Do you recall that?

14 A I do not.

15 Q All right. There was -- and we have some testimony  
16 if we need to refresh your recollection, but let's see if  
17 we can do that by discussing it. There was Adobe Acrobat  
18 Standard that sold at one price and Acrobat Pro, which you  
19 may use, that sells at a different price point. Do you  
20 recall that?

21 A I do recall the different products, and I recall that  
22 as a consumer but not from that case in particular.

23 Q Do you recall, in that case, testifying that because  
24 the same accused functionality was in both products, the  
25 difference in price, quote, is not and cannot be because

Ryan Sullivan - Cross

1822

1 of the accused technology?

2 A I would believe that would be correct.

3 Q Okay. And you used the numbers that you got from  
4 Dr. Cole in your first three layers of your apportionment,  
5 correct?

6 A His quantification of those numbers as supported and  
7 evaluated from my analysis as well.

8 Q But he's the one who quantified those, gave you those  
9 numbers?

10 A He did quantify those, and I used the numbers as he  
11 quantified them.

12 Q Correct. And the first numbers, then, that you  
13 quantified started at level 4 in the apportionment  
14 analysis?

15 A Fair enough.

16 Q Okay. And you used what's called incremental  
17 profitability. Is that true?

18 A That's right.

19 Q And maybe we could put your slide 38 on the screen,  
20 and this is a slide you showed during your direct  
21 examination?

22 A It was displayed during my direct exam, yes.

23 Q All right. And your point here was the incremental  
24 profitability was 66.7 percent and what you've subtracted  
25 are three things, correct?

Ryan Sullivan - Cross

1823

1 A Yes.

2 Q For implementation, you used the 3.6 million, or so,  
3 that you opined that Norton spent on developing the  
4 machine learning aspect of SONAR/BASH?

5 A It is what I determined from the economic evidence,  
6 which is 3.6 million.

7 Q And for cost of goods sold -- COGS it's sometimes  
8 referred to as?

9 A That's right.

10 Q And that is the cost of selling the goods, as I think  
11 you explained it?

12 A It's the cost of the goods that are sold. It's not  
13 the cost of the selling itself.

14 Q Right. The materials, the inputs to actually making  
15 and selling the product?

16 A Making.

17 Q Okay. And then sales and marketing would be selling  
18 the product?

19 A That's right.

20 Q Okay. And what's not in here is what you'd have for,  
21 let's say, operating profitability or net profitability.  
22 You haven't used those here, correct?

23 A Some of it. So cost of goods sold and sales and  
24 marketing are typical deductions to get an operating  
25 profit. As I mentioned, there are two other items that

Ryan Sullivan - Cross

1824

1 would take you to that level, which is research and  
2 development and general and administrative. And in my  
3 view, it would not be appropriate to deduct those.

4 Q And you alluded to this in direct examination, sir.  
5 In other cases, you've used something other than  
6 incremental profitability. True?

7 A I endeavor to use incremental profitability, and  
8 depending upon the increment, sometimes that means that  
9 incremental profits are equivalent to operating profits  
10 and at other times not. There are a number of occasions  
11 where sales and marketing, for example, are not  
12 incremental and sometimes there are. It just depends upon  
13 what that increment is.

14 Q Sure. That same Adobe case that we're both familiar  
15 with, you used -- in that case, you went to the 10K of  
16 Adobe for the year of the hypothetical negotiation and  
17 used operating income. Do you recall that?

18 A I do not recall the year. I do recall the remainder  
19 of what you said.

20 Q Okay. That you went to the -- in whatever year the  
21 hypothetical negotiation was, you went to -- let me strike  
22 that. Let me withdraw it.

23 I think you're saying you don't know if you used  
24 the hypothetical negotiation year?

25 A I do not recall the time period.

Ryan Sullivan - Cross

1825

1 Q But you recall looking to the 10K or the securities  
2 filing and looking at operating income in calculating your  
3 hypothetical negotiation, right?

4 A Looking at operating expenses, yes.

5 Q All right. And let's take a look -- and you've  
6 provided that in this report. Let's look to your  
7 attachments to your 2019 report at Attachment C1.

8 MR. MORIN: And if we blow that up a little  
9 bit --

10 THE COURT: Is this in something I have?

11 MR. MORIN: It may not be if they didn't hand  
12 up -- did you hand up all of his attachments to his report  
13 in direct?

14 If not, we can get it for Your Honor.

15 Your Honor, just for context, Dr. Sullivan had  
16 large attachments to his report. This is one of them. I  
17 thought they would have been handed up in direct. It's my  
18 apologies. We'll get it for you.

19 MR. BEENEY: Which ones do you want?

20 MR. MORIN: The 2019 opening report.

21 May I approach, Your Honor?

22 THE COURT: My CSO will do that.

23 MR. MORIN: Please. Thank you.

24 THE COURT: All right. Now, where am I in this  
25 report?

Ryan Sullivan - Cross

1826

1 MR. MORIN: You are in Attachment C1,  
2 Your Honor.

3 THE COURT: Okay. Thank you.

4 MR. MORIN: Of course.

5 BY MR. MORIN:

6 Q And you'll remind us, the hypothetical negotiation  
7 here took place in either 2011 or 2013?

8 A That's right.

9 Q And just to reorient ourselves, in your apportionment  
10 you used the incremental profitability rate of 67 percent.  
11 Do I recall that correctly?

12 A That's right.

13 Q Right.

14 A And that's just over a broader time period, and we'll  
15 probably have to make a little distinction here for fiscal  
16 year versus calendar, but --

17 Q Understood. If we look at the years of the  
18 hypothetical negotiation, we see for 2011, the operating  
19 margin is 14.2 percent. Do you see that?

20 A For fiscal year 2011.

21 Q And --

22 A Which is different from calendar year.

23 Q Of course. And if we look at the fiscal year of  
24 2013, it's 16 percent?

25 A Correct.

Ryan Sullivan - Cross

1827

1 Q And if we look at net margin, which is what you have  
2 when it's all said and done, it's 9.6 percent in 2011,  
3 correct?

4 A I disagree with the "when all is said and done."

5 However, numerically, the net margin in fiscal  
6 2011 was 9.6 percent and 10.9 percent in 2013 fiscal.

7 Q The net profitability of the overall company in 2011  
8 was 9.6 percent?

9 A The net income is. I would not call that the overall  
10 net profitability.

11 Q Okay.

12 A The two are a bit different.

13 Q All right. The net income for the company was  
14 9.6 percent, correct?

15 A That's right, \$593 million.

16 Q The net income of the entire company in 2013 was  
17 10.9 percent?

18 A That's right.

19 Q Okay. That was on level 4 beforehand that we had  
20 discussed profitability. Can we talk about level 5,  
21 Dr. Sullivan?

22 A Of course.

23 Q Level 5 is when you talk about the relative  
24 contributions of how we're going to split up that profit,  
25 if you will?

Ryan Sullivan - Cross

1828

1 A Yes.

2 Q So you have calculated through level 4 the  
3 profitability that you assigned to the patented technology  
4 in the product. Is that fair?

5 A Say that again. I didn't follow.

6 Q By the time we're through level 4, you've determined  
7 the profitability of the accused feature in the product.  
8 Fair?

9 A It's the profit that is attributable to the patented  
10 functionality.

11 Q Right. And so now you're trying to decide I have  
12 this much profit that you've assigned to the patented  
13 technology, how are we going to divide that between the  
14 companies. Is that fair?

15 A In effect, yes.

16 Q Okay. And let's put up the -- first slide 42,  
17 please, of your presentation. And what you call that in  
18 your slide 42 is Columbia's contribution, correct?

19 A Yeah. So that's the amount that would go to Columbia  
20 as a royalty, and the remainder would remain at  
21 Symantec/Norton.

22 Q And just to be fair, these are your words, to make  
23 sure we're clear, you've called that Columbia's  
24 contribution, right?

25 A Yes.

Ryan Sullivan - Cross

1829

1 Q Okay. And then you show what you did there on  
2 slide 39, sir, in relative contributions.

3 MR. MORIN: If we could go there.

4 BY MR. MORIN:

5 Q And you have a blue piece of pie called Columbia at  
6 30.2 percent; is that correct?

7 A That's right.

8 Q And the remainder of the pie in gray you've called  
9 Norton at 69.8 percent?

10 A Correct.

11 Q And in the blue portion, you're saying invention,  
12 research and development. Is that fair?

13 A That is the label, yes.

14 Q And just so the jury is clear, no part of this math  
15 or this pie chart was generated using any numbers from  
16 Columbia. True?

17 A Correct. This is all from the Symantec and Norton  
18 data.

19 Q So just so we're all on the same page, when you look  
20 at what Columbia contributed, you're not using any  
21 financial data or any data from Columbia, you're only  
22 comparing numbers within Norton. Is that true?

23 A For the split of the pie, that is correct.

24 Q Okay. And you also don't look at the relative  
25 contributions even within Norton reduced to the accused

Ryan Sullivan - Cross

1830

1 products or even the accused functionality. Here, you've  
2 taken the company as a whole, true?

3 A Correct. Just like in the Adobe case that we worked  
4 on, which came from the 10K filings with the Securities  
5 and Exchange Commission, that is precisely what I used  
6 here, and that reflects the business of Symantec and  
7 Norton, the way that business is operated.

8 Q Right. So -- but I just want to make sure we pause  
9 and we're on the same page. You're using Norton ratios of  
10 Norton numbers in determining Columbia's contribution, but  
11 you haven't taken any inputs at level 5 from Columbia.  
12 True?

13 A At this point of the analysis, it's already isolated  
14 to the patented invention, which reflects Columbia. This  
15 stage utilizes data from Norton and Symantec only and  
16 their financial data.

17 Q All right. And you have the ratio in terms of the  
18 research and development, and you call that invention to  
19 commercialization. Fair?

20 A The ratio of R&D as compared to the sum or the total  
21 of R&D, plus sales and marketing.

22 Q Now, if we think about what actually happens in the  
23 hypothetical negotiation, in the hypothetical negotiation,  
24 first of all, we can agree it would be a nonexclusive  
25 license?

Ryan Sullivan - Cross

1831

1 A That's right.

2 Q And it's effectively what I've used as an analogy, a  
3 fishing license in the sense that all it means is that  
4 Columbia, if you have the hypothetical negotiation, is not  
5 going to sue Norton for patent infringement. Fair?

6 A I would not put it that way.

7 Q All that they have is the right to practice under the  
8 patent. Is that fair?

9 A They do have the right to use the patented  
10 technology, and I view that as different from what you  
11 said a moment ago.

12 Q If I was unclear, I am trying to make the point that  
13 that license agreement in your hypothetical negotiation  
14 doesn't come with, let's say, any source code, right?

15 A No, it does not come with source code. It does not  
16 come with an ability to exclude others from utilizing the  
17 technology. It's the right for Symantec and Norton to use  
18 the technology.

19 Q Right. And it's actually -- it's only the right for  
20 Symantec and Norton to use the technology in terms of this  
21 patent of Columbia's. For example, it doesn't give Norton  
22 clearance against other companies' patents, right?

23 A That's correct.

24 Q Or even other Columbia patents. They could be sued  
25 on other Columbia patents even if they had your

Ryan Sullivan - Cross

1832

1 hypothetical license, right?

2 A To the extent that Symantec and Norton are utilizing  
3 or infringing other technology, that would be separate.

4 Q Right. So for example, we heard Professors Stolfo  
5 and Keromytis have hundreds of patents. You're aware of  
6 that?

7 A I don't think it was hundreds. I think it was 103  
8 and in the 60s for Professor Keromytis.

9 Q Fair enough. 163 patents for the two of them, right?

10 A That is my understanding.

11 Q And you understand Columbia has other researchers who  
12 have other patents, right?

13 A Correct.

14 Q So we're all on the same page -- bless you.

15 So we're all on the same page, you understand,  
16 sir, that this hypothetical license that you've  
17 constructed and say is 227 million, they could enter that  
18 deal and the next day Norton would be subject to suit from  
19 Columbia on any other patents?

20 MR. BEENEY: I'm sorry. Objection, Your Honor.  
21 There's no evidence that Columbia has any patents that  
22 Norton is infringing other than the two in this case.

23 THE COURT: I'm going to sustain that. What's  
24 the underlying predicate?

25 MR. MORIN: Your Honor, I can move on, but the

Ryan Sullivan - Cross

1833

1 point I was making is it's a license that doesn't give  
2 peace of mind for everything. It's only for two patents.

3 THE COURT: Right. But you have no underlying  
4 predicate that Columbia has any other licenses under which  
5 to sue, and we've heard testimony, for instance, that  
6 Columbia has sued twice, and so I think it is an unfair  
7 hypothetical.

8 MR. MORIN: Okay. I'll move on, Your Honor.

9 BY MR. MORIN:

10 Q And we can agree that Norton did a whole lot of work  
11 in commercializing -- developing first, before they  
12 commercialized, developing the patented technology. True?

13 A They did some development, and that expense, as I  
14 mentioned, is approximately \$3.6 million.

15 Q And you have a bit of a software background, right,  
16 Dr. Sullivan?

17 A In varying degrees, correct.

18 Q And what Norton had to do was, for example, design  
19 the product and then they had to write and debug the  
20 source code? You've written source code before?

21 A So there's two things there. Yes, I have written  
22 source code.

23 Q And debugging it can be a pain?

24 A If I've written it well, it's not, yet if I've made  
25 mistakes, it is.

Ryan Sullivan - Cross

1834

1 Q All right. And they had to build the back-end  
2 infrastructure and test and validate the product, right?

3 A I would expect that they would do so.

4 Q They had to go through regulatory review and privacy  
5 review and all the other things?

6 A That I do not know.

7 Q But in our hypothetical negotiation, they have to do  
8 all of that. None of that, no code, no know-how was  
9 supplied by Columbia. Fair?

10 A There is patented technology in the invention that is  
11 supplied. The development in that cost is something that  
12 would be borne by Symantec, and that's the \$3.6 million  
13 that they deducted in getting to -- along with other  
14 costs, in getting to the profitability. So it is  
15 accounted for.

16 Q Okay. Are you aware that Columbia is asserting two  
17 categories of infringement by Norton, one is direct  
18 infringement and one is indirect infringement?

19 A I understand that.

20 Q And I don't know if you heard Dr. Bailey testify on  
21 direct in his examination that the direct infringement was  
22 based on testing that's done by Norton and its use of the  
23 product to protect its own computers. You're aware of  
24 that?

25 A I understand that.

Ryan Sullivan - Cross

1835

1 Q But you haven't separately, in your reports or in  
2 your opinion, quantified direct versus indirect  
3 infringement. Fair?

4 A Not separately. The damages, in my view, would be  
5 the same whether it would be direct or indirect  
6 infringement.

7 Q So if all of the use that Norton had ever done with  
8 the products was using it on its own products and testing  
9 the product, in your view, same damages?

10 A In this case, the evidence demonstrates that it is  
11 those activities that enable the sales and the global  
12 sales for Symantec and for Norton.

13 Q Okay. You talked a bit about worldwide sales  
14 damages, and you opined that Columbia is owed 227 million  
15 in patent damages based on worldwide sales. Do I have  
16 that right?

17 A That is the amount of the reasonable royalty in the  
18 event there is a finding of infringement.

19 Q And of that, more than half is for sales that were  
20 made outside the United States. True?

21 A Not quite. It is roughly half. And it's sales to  
22 customers who are located outside the United States.

23 Q Right. So if we could put your slide up on the  
24 screen.

25 MR. MORIN: If we could go to slide 44 and we go

Ryan Sullivan - Cross

1836

1 to the bottom line number.

2 BY MR. MORIN:

3 Q The worldwide you have is 227 million and change.

4 Fair?

5 A Yes.

6 Q And if you go to the next page, USA only, if it's  
7 just the U.S. damages based on the U.S. patent, it would  
8 be 107 million, correct?

9 MR. BEENEY: Objection. Mischaracterizes the  
10 testimony. It's not just U.S. patents. It's U.S.  
11 customers as compared to customers outside the  
12 United States. Both are U.S. customers. There was an  
13 inaccurate predicate in the question.

14 THE COURT: That's sustained.

15 BY MR. MORIN:

16 Q Let me ask it differently. If the only infringing  
17 sales are found to be to customers who are located in the  
18 United States, then damages would drop by \$120 million.  
19 Fair?

20 A There would be two different amounts, and that  
21 difference is roughly \$120 million.

22 Q Okay. And, again, let's restate it with respect to  
23 the sales to foreign customers, customers outside the U.S.  
24 You don't have any opinion about whether Norton has  
25 infringed when making those sales, correct?

Ryan Sullivan - Cross

1837

1 A Well, to be clear, I do not have an opinion on  
2 whether there is infringement one way or the other, and  
3 that does not change whether it's a customer located in  
4 the United States or outside of the United States.

5 Q Right. You made a few points on global sales, and  
6 one of the points that you made --

7 MR. MORIN: If we could pull up slide 18 that  
8 you had.

9 BY MR. MORIN:

10 Q -- is that the design and development occurs in the  
11 United States. Do you see that?

12 A Substantive design and development, correct.

13 Q And you are aware, of course, that the first accused  
14 product was released in 2009?

15 A That is my understanding.

16 Q And that's two years before the first of these  
17 patents issued?

18 A It is roughly two years.

19 Q And so we can agree that at least the design and  
20 development that led to the first accused product occurred  
21 before there was a patent, correct?

22 A The patent had been applied for at that point in  
23 time. The patent had not issued.

24 Q So the design and development of that product, the  
25 initial product occurred before there was an issued

Ryan Sullivan - Cross

1838

1 patent, correct?

2 A The initial design and development would have been  
3 prior to that point in time.

4 Q Okay.

5 A That does not mean there's not continuing design and  
6 development and testing and updates and all of those  
7 items.

8 Q Understood that there might be more things going on  
9 later, but when you talk about where the product -- when  
10 the product was initially made, that preceded the patents  
11 in suit, correct?

12 A As a matter of chronology, some of that design and  
13 development initially would occur before 2011, yet the  
14 activities that constitute the infringement as alleged  
15 continue throughout time.

16 Q I am only focused on one thing with this slide that I  
17 think we can reach agreement on. This slide, you told the  
18 jury, that all substantive design and development occurs  
19 in the USA. And my question simply is, and I think we'll  
20 reach agreement, that at least the design and development  
21 that led to the initial release of the accused products  
22 occurred at a time where there was no issued patent.  
23 True?

24 A Not quite because of enterprise versus Norton line of  
25 consumer products. But for the Norton line of consumer

Ryan Sullivan - Cross

1839

1 products that were issued prior to the issuance of the --  
2 that were released prior to the issuance of the patent, by  
3 definition that occurs prior.

4 Q Right. And if we look to your slide 19, sir, it says  
5 that master software was created in the U.S., and you talk  
6 a little bit about golden discs in the upper right-hand  
7 corner -- or you quote some testimony that talks about  
8 golden discs, right?

9 A That's right.

10 Q And you talked about a basketball that could be  
11 shipped abroad during your direct. With respect to the  
12 golden discs, sir, to your knowledge they never leave  
13 California. Fair?

14 A The golden disc is two different items, one --

15 Q Bless you.

16 A One can think of that as a physical disc. It also  
17 is -- that term is used to reflect to the source software  
18 that is generated that can be delivered electronically.

19 Q Okay.

20 A So it's not always a physical disc. It can be, but  
21 oftentimes it's not.

22 Q The physical golden discs, to your knowledge, have  
23 never left California. Fair?

24 A I do not have personal knowledge of that.

25 Q Okay.

Ryan Sullivan - Cross

1840

1 MR. MORIN: One moment, Your Honor.

2 BY MR. MORIN:

3 Q Let's talk briefly about the '643 patent, if we  
4 could?

5 A Of course.

6 Q And just like with the patent infringement analysis,  
7 the damages analysis, here as well you have no opinion on  
8 whether Norton has committed fraudulent concealment,  
9 correct?

10 A That's right.

11 Q And if the jury were to find that Norton hasn't  
12 committed fraudulent concealment, the damages on that part  
13 of the case, to your knowledge, would be zero. Fair?

14 A That would be my understanding.

15 Q All right. And you say that Columbia lost the  
16 ability to sell and/or license the '643 patent, right?

17 A I don't know that I said that earlier today, but that  
18 is accurate.

19 Q And that's what you say in your report. Fair?

20 A Yes.

21 Q And you say that lost value is best represented by  
22 what Norton would have paid Columbia in an arm's length  
23 transaction for the '643 patent. Fair?

24 A Yes.

25 Q And that hypothetical transaction would have taken

Ryan Sullivan - Cross

1841

1 place on the filing of the nonprovisional application,  
2 April 4th, 2011, correct?

3 A Yes.

4 Q And unlike in what we just talked about, just so  
5 we're clear, the hypothetical negotiation for patent  
6 infringement, in this transaction there would be no  
7 assumption of validity or infringement, correct?

8 A That's right.

9 Q And at that point in time, I think we can agree that  
10 the transaction would have involved a patent application  
11 rather than an issued patent at that time, correct?

12 A At that time, correct.

13 Q Right. And because there's no assumption of  
14 validity, the parties wouldn't know whether a patent would  
15 ever issue from that application. Fair?

16 A There would be an expectation, of course. That's the  
17 intention.

18 Q Okay. They don't know, though, whether a patent  
19 would issue, right?

20 A Not with certainty.

21 Q Okay. And you say that transaction would have  
22 yielded over \$22 million; is that right?

23 A That's right.

24 Q You submitted a report in 2014, correct?

25 A I did.

Ryan Sullivan - Cross

1842

1 Q And, again, just so we're clear, our hypothetical  
2 transaction would have occurred in 2011, right?

3 A That's right.

4 Q And so that report was after when the hypothetical  
5 transaction would have occurred?

6 A Almost by definition, yes.

7 Q And at that point in time, you opined that Norton  
8 owed Columbia 12.9 million for fraudulent concealment.  
9 True?

10 A I do not recall the exact number.

11 Q If we could direct your attention to your 2014 report  
12 at paragraph 172, please. Tell me when you're there, sir.

13 A I am there.

14 Q And your testimony -- or your report, I should say,  
15 in 2014 about this 2011 transaction was that it was --  
16 would have yielded \$12.9 million. True?

17 A Roughly speaking, that's right.

18 Q And we heard a little bit about this yesterday with  
19 Dr. Cole. That was when you were working with a different  
20 set of lawyers?

21 A There were different lawyers, different data,  
22 different facts, evidence, information.

23 Q Sure. But the -- in 2014, which is three years after  
24 when the hypothetical transaction would have occurred,  
25 your number was 12.9 million?

Ryan Sullivan - Cross

1843

1 A At the time of this report, that is correct.

2 Q And now you're number is 22 million plus, right?

3 A Correct.

4 Q You talked about the Columbia-Allure agreement, and  
5 you used -- the math, at least, is you used the royalty  
6 rates in that agreement to come up with your damages  
7 number, at least in part, correct?

8 A Correct.

9 Q All right. And you applied those rates to what you  
10 said would have been the expected sales of Norton's DLP  
11 product over the life of the '643 patent. Fair?

12 A Roughly, looking at the different time periods of  
13 patent application versus patents. Issued patent, that  
14 is.

15 Q And the 2.5 percent royalty for expected DLP product  
16 sales, you used 2.5 from the date of the application until  
17 the date that the '643 patent issued. Fair?

18 A Correct.

19 Q And then you used 4 percent from the issuance date  
20 until 9 years from now, until 2031?

21 A Correct.

22 Q Now, in the Columbia-Allure agreement, those royalty  
23 rates applied only to products covered by the claims of a  
24 patent or patent application. Fair?

25 A That's right.

Ryan Sullivan - Cross

1844

1 Q And that's consistent with Mr. Herskowitz's testimony  
2 earlier in this trial that you generally only pay  
3 royalties under a license agreement if you use the patent.  
4 Fair?

5 A I don't recall exactly what he said, but that is  
6 consistent with my understanding.

7 Q Let's --

8 A There are different types of license agreements, but  
9 that is very typical.

10 Q All right. So let's just put it on the screen and  
11 see if we can agree that this is not only typical but also  
12 applies to the Allure agreement that you're using.

13 MR. MORIN: If we could put up the trial  
14 transcript at page 460, lines 5 through 8.

15 BY MR. MORIN:

16 Q "But for our purposes here, the important thing to  
17 know is that with the patent royalties, you only pay if  
18 you use the patent?"

19 Answer, "That's correct."

20 And that's consistent with your general  
21 understanding?

22 A Different agreements have different terms in terms of  
23 payment of royalties. The Allure agreement is what would  
24 be considered an infringement-based agreement such that  
25 the royalties are payable for the use of the technology.

Ryan Sullivan - Cross

1845

1 Q Right. And if -- under the Allure agreement, if  
2 you're not practicing any claims of either the patent  
3 applications that are licensed or the patents, you pay  
4 nothing in royalties, correct?

5 A There are other terms of that agreement, including  
6 equity, that is supplied on top of that, and that's  
7 irrespective of that piece. And there are other royalties  
8 for other pieces. So it's not a blanket the way you  
9 suggest.

10 Q At least in the way you apply the Allure agreement,  
11 the 2.5 and the 4 percent would only apply if you practice  
12 the claims. True?

13 A No, that's not right.

14 Q Okay. Let's look at the -- what you put on the  
15 screen for the jury on slide 53, please.

16 MR. MORIN: And if we could blow up the bottom  
17 portion. This is not my highlighting, just for the  
18 record.

19 BY MR. MORIN:

20 Q It says the 4 percent royalty, you've highlighted,  
21 are on net sales of patent products covered by an issued  
22 patent, and the royalty of 2.5 percent is for net sales of  
23 patent products covered by the then pending patent  
24 application. And maybe we could put a pin in that.

25 Let's look at what "covered by" is defined as.

Ryan Sullivan - Cross

1846

1 If we could go to tab 7 of your binder. You have a binder  
2 there that we've handed you. We won't use much.

3 MR. MORIN: And this is PX-62, for the record.

4 BY MR. MORIN:

5 Q If we go to the first page and the definition of  
6 cover, and it says, "Cover or covered by shall mean  
7 infringes in the case of a claim in an issued patent, or  
8 would infringe the claim if it existed in an issued  
9 patent, in the case of a claim in a pending" --

10 THE COURT: You know you're reading that really  
11 fast.

12 MR. MORIN: Sorry, Your Honor.

13 THE COURT: We just have to keep up with you.

14 MR. MORIN: You got it.

15 THE COURT: I know what you're doing.

16 MR. MORIN: Okay.

17 BY MR. MORIN:

18 Q -- "would infringe the claim if it existed in an  
19 issued patent, in the case of a claim in a pending  
20 application." Do you see that?

21 A Yes, I do.

22 Q All right. So the 2.5 and the 4 percent are paid if  
23 there's a sale of a product that falls within the claim of  
24 either a patent application or an issued patent?

25 A Allure pays royalties under this agreement to

Ryan Sullivan - Cross

1847

1 Columbia. I used this agreement as a reference for  
2 determining what is a reasonable rate to be applied to  
3 Symantec's and Norton's DLP sales, the data loss  
4 prevention. And as I explained, that is a result of the  
5 defensive nature that they were utilizing the patent for,  
6 to protect those sales.

7 Q We will talk about that. Maybe we're talking past  
8 each other. We can at least agree that under the actual  
9 terms of the Allure agreement, these 2.5 and 4 percent  
10 royalties were only due if a product practiced the claim  
11 of a pending application or issuing patent. Is that fair?

12 A That's correct.

13 Q Okay. And you don't have any evidence or information  
14 that at least as of 2011 anyone intended to practice the  
15 technology or practice the claims in the '643 patent  
16 application. Fair?

17 A I disagree.

18 Q All right. You certainly didn't have any evidence or  
19 information that Symantec infringed or practiced the  
20 claims of the '643 at that time, correct?

21 A I have not made an opinion or come to a conclusion on  
22 infringement or practicing. However, there is evidence  
23 that Symantec was considering and evaluating practicing  
24 the particular technology claimed in the '643 patent.

25 Q Right. And when you talk about the -- you talked

Ryan Sullivan - Cross

1848

1 about the '643 patent being used as a defensive patent.

2 Do you recall that?

3 A Yes.

4 MR. MORIN: And if we could go to the slide that  
5 you put up, which is slide 51.

6 BY MR. MORIN:

7 Q And this is based on an e-mail from Dr. Dacier to  
8 Darren Shou; is that correct?

9 A That's right.

10 Q And is it true that in the million plus, I believe,  
11 pages of documents produced in the case, this is the only  
12 document that you point to in your report or in your  
13 examination that anyone at Norton intended to use this as  
14 a defensive patent?

15 A I recall testimony in this regard from Mr. Dacier.  
16 Other documents I just don't have committed to memory.

17 Q All right. You don't -- you're free to look at your  
18 report, but I will represent to you my belief that the  
19 only thing you cite to on the value or the use of this as  
20 a defensive patent is one line from one e-mail. Do you  
21 have reason to believe otherwise that you cited to  
22 anything else?

23 A That was compound, two different things about value  
24 and defensiveness. The value from being defensive I'll  
25 take your representation, but there's other value that I

Ryan Sullivan - Cross

1849

1 identify.

2 Q Okay.

3 MR. MORIN: We can take that down.

4 BY MR. MORIN:

5 Q You discussed that this hypothetical transaction  
6 would have been in April of 2011 when the nonprovisional  
7 patent application was filed?

8 A April 2011, that's correct.

9 Q And let's again reorient ourselves. There's no  
10 assumption of validity, right?

11 A That's right.

12 Q And so we need to put ourselves back in the room with  
13 how Columbia and Norton were looking at this technology at  
14 the time. Fair?

15 A That's right. That's why the Columbia-Allure  
16 agreement is so informative because it too does not  
17 reflect an assumption of infringement or validity of those  
18 patents.

19 Q Right. But separate and aside from that, we should  
20 do our best, and the jury should do its best, to try to  
21 put ourselves in the room, what did people think of the  
22 value of this application, what would they have demanded  
23 for it. Is that fair?

24 A For the patent application.

25 Q And we actually know a little something of what we

Ryan Sullivan - Cross

1850

1 thought about the patent application from the record,  
2 don't we?

3 A There's a number of things.

4 Q And let's take a look at tab 2 in the binder, DX-AP.

5 THE COURT: DX?

6 MR. MORIN: AP. Apple, paul, Your Honor.

7 THE COURT: Thanks.

8 BY MR. MORIN:

9 Q And this is an e-mail when a provisional patent  
10 application was being discussed, and Dr. Stolfo e-mails  
11 that, "I don't think we should file a patent application.  
12 There is prior art well before the discussions between  
13 Marc and Angelos. I have it well documented." Do you see  
14 that?

15 A I do.

16 Q All right. And what they are saying when they're  
17 saying there was prior art well before the discussions,  
18 they're saying they don't think that this would be a valid  
19 patent?

20 A It's not how I would interpret this.

21 Q They say they don't think we should file a patent  
22 application, right?

23 A Yes. And there's good reason.

24 Q And it says, "There is prior art." And that's  
25 something that comes before the patent, right?

Ryan Sullivan - Cross

1851

1 A Yes.

2 Q Okay. And then Columbia said it thought it already  
3 had patent applications covering the same technology. Do  
4 you recall that?

5 MR. BEENEY: Object to that. I don't think  
6 there's any evidence of that, Your Honor.

7 THE COURT: You can show evidence. So that's  
8 sustained to the extent --

9 MR. MORIN: Of course, Your Honor.

10 BY MR. MORIN:

11 Q If we could look at the next bit of this. Mr. Chu,  
12 from the Columbia technology office says that he's  
13 reviewed his dockets and we have this area pretty solidly  
14 covered, and it finishes with the idea that, "I'm of the  
15 opinion that there is not much, if anything, left to  
16 claim." Do you see that?

17 A I do.

18 Q And Mr. Chu there was saying that they had already  
19 covered this technology with prior applications and that  
20 there was not much, if anything, left to claim, right?

21 A No. And this is where the fraudulent concealment as  
22 alleged affects the patenting that proceeded, because the  
23 process, as that works, is with the '643 patent being  
24 prosecuted, that impacts the inventions of which could be  
25 patented by Columbia for their applications.

Ryan Sullivan - Cross

1852

1 Q Your opinion, just so we're clear, is that the later  
2 filed patented applications would constrain what Columbia  
3 could do in its earlier filed patent applications. Is  
4 that your testimony?

5 A No, that's not what I stated.

6 Q And there are points in these e-mails, and we heard  
7 testimony on this last week, was they thought that they  
8 already disclosed and put into patent applications these  
9 same things. Fair?

10 A I wouldn't use the term "same things," but there are  
11 similar concepts, and that is the issue.

12 Q And even as a result of that, with them saying we've  
13 got everything covered and there's prior art, your  
14 testimony is that they demand \$22 million. Fair?

15 THE COURT: There's an objection.

16 MR. BEENEY: Mischaracterizes the document.

17 THE COURT: Pardon me?

18 MR. BEENEY: Mischaracterizes the document.

19 What Mr. Chu says is, "I am of the opinion there is not  
20 much, if anything, left to claim."

21 THE COURT: Right. You can't say everything is  
22 covered when he didn't say that.

23 MR. MORIN: In that case, Your Honor, I'll pass  
24 the witness. I have no further questions.

25 BY MR. MORIN:

Ryan Sullivan - Cross

1853

1 Q It was nice to see you, Dr. Sullivan.

2 A Thank you.

3 MR. BEENEY: We have nothing, Your Honor. Thank  
4 you.

5 THE COURT: All right. May this witness be  
6 excused?

7 MR. BEENEY: For Columbia, yes, Your Honor.

8 MR. MORIN: Thank you, Dr. Sullivan.

9 THE COURT: Yes. All right. Sir, well, you're  
10 excused. We appreciate your time and your patience, and  
11 we wish you well. Thank you.

12 THE WITNESS: Thank you.

13 (Witness stood aside.)

14 THE COURT: Are we prepared to go forward with  
15 the next witness?

16 MR. GROSS: I've learned my lesson to come up to  
17 the mic now.

18 THE COURT: You know what. It's not catching  
19 your voice. I don't know why.

20 MR. GROSS: How about now?

21 THE COURT: A little better.

22 MR. GROSS: I can hear the echo now.

23 Columbia and Norton call the next witness,  
24 Corina Mutu, by videotape deposition.

25 THE COURT: All right. And do we have

1 transcripts?

2 MR. GROSS: I apologize, Your Honor. I forgot  
3 to hand this up. These are the corrections to -- all four  
4 transcripts that will be played. I gave them to our  
5 colleagues the other day, and they had no comments on  
6 them.

7 THE COURT: All right. Mr. Wigley, do I have  
8 the transcripts?

9 MR. GROSS: I handed them to your courtroom  
10 deputy this morning.

11 THE COURT: Oh. Never mind. Yes, I do have the  
12 transcript.

13 Okay. Bless you, whoever just sneezed. I  
14 think.

15 Thank you, sir.

16 (Video deposition of Corina Mutu was played.)

17 THE COURT: Now, I'm going to ask, can you all  
18 hear this? It's pretty light. Everybody can hear? Yes?

19 Okay. Sorry. Better safe than sorry.

20 All right. Does anybody object to how that  
21 testimony was presented?

22 MR. LUMISH: No objections from Norton,  
23 Your Honor.

24 THE COURT: I just want to remind the jury that  
25 any video that you see includes testimony that is offered

1 both by Columbia and by Norton.

2 Okay.

3 MR. GROSS: May I approach to --

4 THE COURT: Please do.

5 MR. GROSS: Columbia calls its next witness,  
6 Dermot Wall, by videotape deposition, which contains  
7 designations from both parties.

8 Mr. Wall testified as a 30(b)(6) witness on  
9 behalf of Norton on the following topics: The identity,  
10 location, role or title and reporting chain for  
11 individuals involved in the conception, design,  
12 development and testing of Norton's software, and the  
13 value of SONAR to malware detection in Norton's software.

14 THE COURT: Okay. Thank you. Again, this is  
15 offered by both Columbia and Norton.

16 (Video deposition of Dermot Wall was played.)

17 THE COURT: All right. Does anybody object to  
18 how that testimony was presented?

19 MR. LUMISH: No objection from Norton,  
20 Your Honor.

21 THE COURT: All right. Now, I know we have a  
22 couple more deposition testimonies, but this would be when  
23 we'd take a break. Is there any objection to that?

24 MR. BEENEY: No, Your Honor. Thank you.

25 MR. LUMISH: No objection.

1 THE COURT: All right. I think we'll stretch a  
2 little bit. It's 4:00. We'll -- we'll come back at 4:20.

3 (The jury exited the courtroom.)

4 MR. LUMISH: May I ask one question, Your Honor?

5 THE COURT: Certainly.

6 MR. LUMISH: May I approach?

7 THE COURT: Of course.

8 MR. LUMISH: Our understanding is that after the  
9 next round of video, which, by my count, runs somewhere  
10 around 45 minutes or 50, that plaintiff is going to rest.

11 Our first witness is ready to come today, but  
12 I'm assuming, based on the break, that we don't need him  
13 to sit around in a suit for the rest of the afternoon.

14 THE COURT: No.

15 MR. LUMISH: Thank you, Your Honor.

16 MR. BEENEY: I guess I just stood corrected for  
17 the record. We're not going to rest because we're  
18 bringing in some of the testimony in our case through  
19 Norton's witnesses as well.

20 THE COURT: Right, which you both established  
21 before.

22 MR. BEENEY: Yes.

23 THE COURT: That's why there's not going to be a  
24 motion, right. So I think these last videos will be it,  
25 and then we will start tomorrow fresh. All right?

1 And who is the first witness?

2 MR. LUMISH: David Kane.

3 THE COURT: Kane. That's right. Mr. Kane.

4 All right. Okay. So we'll take a recess until

5 4:20.

6 (Recess taken at 3:55 p.m.)

7 (The trial continues on the next page.)

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1 (The trial resumed at 4:20 p.m.)

2 THE COURT: So we're continuing with  
3 deposition testimony; is that correct?

4 MR. GUZIOR: Yes, Your Honor, that's correct.

5 THE COURT: All right. So we'll bring the  
6 jury in.

7 (The jury entered the courtroom.)

8 THE COURT: All right. Ladies and gentlemen,  
9 this is the last round for today. You're going to  
10 hear some more deposition testimony. And I don't have  
11 to tell anybody here that they're still under oath,  
12 but I need to tell you that for both of these, that  
13 these videos include testimony offered by both  
14 parties. All right?

15 MR. GROSS: May I approach, Your Honor?

16 THE COURT: Please do.

17 MR. GROSS: Norton and Columbia call the next  
18 witness, Linda Brennan, by videotape deposition, which  
19 includes designations by both parties.

20 Ms. Brennan testified as a 30(b)(6) witness  
21 on behalf of Norton on the following topics:

22 The distribution of Norton's software,  
23 including the creation and maintenance of electronic  
24 master versions, golden disk versions, and/or master  
25 disk versions of the Norton software, where Norton

1 creates, tests, and maintains master versions, and  
2 from where such versions are sent to others via file  
3 transfer or any other method, and the distribution of  
4 any updates to Norton software.

5 In addition, Ms. Brennan testified as a  
6 30(b)(6) witness on the topic of Norton's historical  
7 and current arrangement with Akamai, Verizon Digital  
8 Media Services or any other content delivery network  
9 or any replicator for Norton software distributed  
10 other than as a digital download, including from where  
11 Symantec sends master versions to such parties to the  
12 extent it concerns distribution.

13 And the final topic on which Ms. Brennan  
14 testified as a 30(b)(6) witness on behalf of Norton  
15 was whether and how a non-U.S. customer purchasing or  
16 operating Norton software will interact directly or  
17 indirectly with Norton customers or other equipment in  
18 the United States and how payment from non-U.S.  
19 customers flows into Norton to the extent it concerns  
20 distribution.

21 THE COURT: All right. Are we prepared to go  
22 forward? You can play the video.

23 (A video deposition of Linda Brennan is  
24 played at this time.)

25 THE COURT: Does anybody have any objection

1 about how that testimony went in?

2 MR. LUMISH: No objection, Your Honor.

3 MR. GROSS: May I approach?

4 THE COURT: Yes. No objection, right?

5 MR. GROSS: No objection.

6 THE COURT: All right. You may approach.

7 MR. GROSS: Thank you all for your patience.

8 The last witness for today, Columbia calls  
9 its next witness, Pedro Reyes, by videotaped  
10 deposition, which includes designations from both  
11 parties.

12 Mr. Reyes testified as a 30(b)(6) witness on  
13 behalf of Norton on the following topic:

14 The manufacturing, mastering, testing, and  
15 distribution of Norton's software including:

16 (1) The creation and maintenance of  
17 electronic master versions, golden disk versions,  
18 and/or master disk versions of Norton software;

19 (2) Where Norton creates, tests, and  
20 maintains master versions, and from where such  
21 versions are sent to others via file transfer or any  
22 other method; and

23 (3) The creation, maintenance, testing, and  
24 distribution of any updates to Norton's software.

25 The parties agree that Mr. Reyes' testimony

1 about the build and certification of the accused  
2 consumer products also applies to the accused  
3 enterprise products. This includes Mr. Reyes'  
4 testimony about interactions with Perforce.

5 And for the record, the page and lines from  
6 the deposition transcript to which this agreement  
7 applies are page 18, lines 15 through 20; page 28,  
8 lines 5 through 13; page 35, lines 5 through 21; page  
9 36, lines 15 through 25; page 47, line 7 through 15;  
10 page 46, lines 21 through 25; and page 47, line 4  
11 through page 48, line 2.

12 THE COURT: Thank you.

13 (A video of the deposition of Pedro Reyes is  
14 played.)

15 THE COURT: We can't hear that. Can you all  
16 hear that? No, it's still pretty light.

17 THE CLERK: I just turned it up all the way.

18 (The videotape deposition of Mr. Reyes is  
19 resumed.)

20 THE COURT: Does that conclude that  
21 testimony?

22 MR. GROSS: Yes, it does, Your Honor.

23 THE COURT: Any objection to how it came in?

24 MR. LUMISH: No objection from Norton, Your  
25 Honor.

1 MR. GROSS: No objection from Columbia, Your  
2 Honor.

3 THE COURT: All right. Certainly we're near  
4 the end of the day. Is this a good breaking point?  
5 It looks as if it is.

6 MR. BEENEY: I think so, Your Honor.

7 THE COURT: Okay. All right. We will break  
8 for the day. And we will see you again tomorrow  
9 morning.

10 Can we tell the jurors to come in at  
11 nine o'clock, or do we have morning issues that we  
12 should take care of and make sure they don't wait?

13 MR. BEENEY: So depending upon how early Your  
14 Honor would like to get started, I think we conferred  
15 and thought that the morning issue might take  
16 something like 45 minutes.

17 So whenever Your Honor would like to get  
18 started, plus 45, might be a convenient time for the  
19 jury.

20 THE COURT: Okay. So I'll ask you all to  
21 report at 9:30. We usually get together about an hour  
22 before you normally come in. And so if you could be  
23 ready to go at 9:30.

24 You guys promise me that we're going to be  
25 ready to go at 9:30 if we start at eight?

1 MR. BEENEY: I think given Your Honor's  
2 promise to the jury, we must absolutely get started at  
3 9:30, not 9:31. 9:30.

4 MR. LUMISH: Agreed, Your Honor.

5 THE COURT: Okay. Good.

6 We do our best. They're doing their best.  
7 I'm doing my best. I want you all to know that. So  
8 we will see you tomorrow at 9:30.

9 Again, deliberation hasn't started. Just  
10 absorb it, and you'll get more information. And once  
11 you have that and my instructions on the law, that's  
12 when you can start considering things, but not yet,  
13 and not yet talking about it. All right?

14 You all be very safe.

15 Please remain seated while the jury leaves  
16 the courtroom.

17 (The jury exited the courtroom at 5:25 p.m.)

18 THE COURT: All right. So we're going to  
19 have -- did you have something you wanted to say,  
20 Mr. Lumish?

21 MR. LUMISH: I'll wait until you're done. I  
22 did have something I wanted to ask you, though.

23 THE COURT: Go ahead and ask.

24 MR. LUMISH: May I approach?

25 THE COURT: Yes.

1 MR. LUMISH: Your Honor, our case we expect  
2 to go quite quickly. So we could easily be done with  
3 witnesses by lunchtime on Monday.

4 So one question I have for you is whether we  
5 should be prepared to close Monday afternoon if that  
6 were to happen?

7 THE COURT: I think I'd like to use the  
8 jury's time as best as possible. So the answer would  
9 be yes.

10 MR. LUMISH: That would be our preference as  
11 well. Thank you.

12 Second would be Mr. Morin and I are still  
13 discussing it, but we may choose to split the closing  
14 if Your Honor doesn't object to that. We have spoken  
15 with opposing counsel. They were fine with it. They  
16 didn't object anyway. But I wanted to make sure that  
17 was something Your Honor would be okay with.

18 THE COURT: Yeah. We don't normally do that,  
19 but that's fine. I want you all to present the case  
20 as best you can.

21 MR. LUMISH: And then last issue, this is  
22 more just a notice to Your Honor which is there was a  
23 whole dispute about some tutorial slides from the  
24 other side that you may remember in the limines, them  
25 seeking to strike a tutorial that they had provided to

1 Your Honor.

2 THE COURT: Right.

3 MR. LUMISH: Those, I think, you will see in  
4 our slides for Dr. Jaeger, having discussed it with  
5 opposing counsel, having read Your Honor's comments  
6 and concerns about those slides and wanting to avoid  
7 any trouble, we're not going to use those slides. I  
8 just wanted to let you know that. So when you see  
9 them in Dr. Jaeger's material, we're not planning to  
10 use them.

11 THE COURT: All right. That's actually good  
12 to know. Not that you care, but I think that's an  
13 appropriate outcome.

14 MR. LUMISH: We care very much, Your Honor.  
15 So that was all I had. I think Mr. Morin had a  
16 question for you as well on the damage's front.

17 THE COURT: Sure.

18 MR. MORIN: May I approach, Your Honor?

19 THE COURT: Of course.

20 MR. MORIN: This is only for the purposes of  
21 the record. Limine decisions are technically kind of  
22 temporary decisions that can be revisited. We're  
23 looking at streamlining our case, and I just want to  
24 get confirmation from the Court that the limine and  
25 *Daubert* decisions will be enforced and strictly

1 enforced for the remainder of the trial so that we can  
2 make our decisions based upon that, Your Honor.

3 THE COURT: I can't imagine why they would  
4 not be. I certainly don't have anybody asking me to  
5 change them. I know there are objections, but I have  
6 no intention to do anything but enforce them as they  
7 stand.

8 MR. MORIN: Okay. We just wanted to have  
9 that on the record so we could streamline our case.

10 Before the close of our case, I expect we'll  
11 make an offer of proof, again, to preserve the record.  
12 Would Your Honor prefer that be made writing so as not  
13 to take up time reading it in court? We'd be happy to  
14 do that. It won't be argument. It's just placing  
15 things on the record. But we wanted to do it how Your  
16 Honor would prefer.

17 THE COURT: Right. I think having it on the  
18 record is fine. Go ahead unless Columbia objects.

19 MR. BEENEY: No, Your Honor.

20 THE COURT: All right. I think if that  
21 streamlines it, it also creates an easier record for  
22 you all to access should anybody revisit this after we  
23 finish.

24 MR. MORIN: So we'll do it in writing before  
25 the close of the case?

1 THE COURT: Yes.

2 MR. MORIN: And one last -- I just wanted to  
3 be fair. Your Honor had asked about witnesses. In  
4 view of the *Daubert* and limine decisions and the other  
5 instructions Your Honor has given us, we're not going  
6 to call Mr. Hosfield. So we figured we'd give you and  
7 our friends on the other side the heads-up as to that.  
8 So that will limit the number of witnesses that we  
9 have remaining.

10 THE COURT: All right. Okay. So we're  
11 starting with Mr. Kane, correct?

12 MR. MORIN: Correct, Your Honor.

13 THE COURT: Do you care about who you're  
14 saying is next? I don't want you to give up your  
15 strategy.

16 MR. LUMISH: Thank you, Your Honor. I think  
17 we've disclosed to them at least Mr. Kane and  
18 Dr. Jaeger.

19 THE COURT: Okay.

20 MR. LUMISH: So I believe they know at least  
21 that.

22 MR. BEENEY: And one more after that.

23 MR. LUMISH: And then Dr. Nielson is third,  
24 yes.

25 THE COURT: Okay. All right. So that's just

1 helpful to know, but I know that you all -- I don't  
2 want you to go beyond what you're required to. I'm  
3 happy to hear things privately if that's better for  
4 you.

5 All right. So we will start at eight  
6 tomorrow, and that is the discussion about  
7 Dr. Jaeger's -- what Columbia suggests might be claim  
8 construction but that you all have agreed on the use  
9 of the exhibit. So that's no longer before me; is  
10 that correct?

11 MR. BEENEY: Correct, Your Honor. I believe  
12 the only issue for the Court are the Jaeger slides.

13 And if Your Honor would prefer, maybe Your  
14 Honor wants some time to consider the arguments, but  
15 we will commit to getting this done if Your Honor  
16 wants to start at 8:30 instead. We will not keep the  
17 Court more than 45 minutes, period, if that's what you  
18 would prefer to do, but it's up to you.

19 THE COURT: I actually might prefer to start  
20 at eight just so that if I want -- I'll tell you, the  
21 slides are not obviously claim construction when you  
22 look at the pictures on them. And so I might take a  
23 moment just to review what it is you're arguing and  
24 then come back and rule. Maybe I'll be able to do it  
25 right off the bat. Then if I do, perhaps folks can

1 get some coffee, and then we'll start at 9:30.

2 MR. MORIN: Thank you, Your Honor.

3 THE COURT: Yes.

4 MR. GUZIOR: Your Honor, just two  
5 housekeeping matters. Would you prefer that I  
6 approach?

7 THE COURT: Please, it's so much easier for  
8 my --

9 MR. GUZIOR: I like to keep it simple for  
10 Ms. Daffron.

11 First, on the argument tomorrow morning for  
12 claim construction, I put together a binder for myself  
13 of Judge Spencer's 2014 claim construction, the  
14 submissions he received, including things like  
15 Symantec's *Markman* presentation, and I thought it  
16 might be helpful, because I thought it was helpful for  
17 me, if you'd like to receive it tonight. I made  
18 copies, and we can give you two copies, and we'll give  
19 copies to opposing counsel as well.

20 THE COURT: That would certainly be helpful,  
21 I think.

22 MR. GUZIOR: We'll make sure you get that  
23 tonight.

24 THE COURT: Okay.

25 MR. GUZIOR: The second question is just

1 logistics. There hasn't been a huge amount of  
2 impeachment in the trial so far. It's sort of  
3 remarkably absent. So I just wanted to get Your  
4 Honor's preference when it's a fact witness on  
5 deposition video.

6           Would you prefer that, you know, if the  
7 witness is going to be impeached, I first give the  
8 witness time to look at the transcript, and Your  
9 Honor, and opposing counsel, and then we play the  
10 video? Or if there's impeachment and it's pretty  
11 clear, go right to video?

12           THE COURT: Do you all have any kind of  
13 agreement with respect to that?

14           MR. GUZIOR: We don't, Your Honor. I was  
15 going to defer to the Court's preferred procedure.

16           THE COURT: I think perhaps giving them an  
17 opportunity and then going to video is the appropriate  
18 way to go. Is that your question?

19           MR. GUZIOR: Yes. So I'll just reference the  
20 deposition transcript page and line, give it a moment  
21 for people to stand up, and then hearing nothing will  
22 go ahead with the video.

23           THE COURT: Yes. Agreed?

24           MR. LUMISH: That sounds right to us, Your  
25 Honor. We would like an opportunity to make sure it's

1 really impeaching and lodge an objection if it were  
2 not.

3 THE COURT: Absolutely. All right. Okay.

4 MR. GUZIOR: Thank you, Your Honor.

5 THE COURT: All right. Thank you.

6 Wow. Folks need their exercise tonight.

7 MR. BEENEY: I'm sorry for imposing on the  
8 Court.

9 THE COURT: No, that's fine.

10 MR. BEENEY: I have a question that, if I may  
11 pose, and it is sincerely only intended for  
12 informational purposes only. And that is for our own  
13 planning purposes, Your Honor, and given that Norton  
14 is starting its case in the morning, I just wondered  
15 if the Court had a sense of when we might be hearing  
16 on the remaining Dacier issue.

17 THE COURT: It will not be tomorrow. I think  
18 it will be probably Saturday, just so you know.

19 MR. BEENEY: That's helpful. Thank you.

20 THE COURT: My poor clerks. I should say  
21 Saturday or Sunday. They're working really hard. I  
22 know you all are, too. We're all working hard. So  
23 I'm going to say over the weekend, for their sake.

24 All right. Then is that everything?

25 So now does everybody get to stand up because

1 I do? Are you ready?

2 (Recess taken at 5:35 p.m.)

3 (The trial resumes on the next page.)

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1 THE CLERK: This is Kathy Hancock in  
2 Judge Lauck's chambers. We are doing the record review  
3 for April the 21st, confirming the exhibits that were  
4 entered today and the demonstratives that were entered.

5 So we started the day with the redirect of  
6 Eric Cole, and I have PX-511 and PX-1000 as demonstrative.

7 And then we start with Dr. Ryan Michael  
8 Sullivan. We used PX-324, PX-531, PX-535, PX-566, PX-83,  
9 PX-541, PX-170, PX-530, PX-506, PX-350, PX-461, PX-62,  
10 PX-567, PX-568, PX-569, PX-570, PX-617, PX-618, PX-619,  
11 PX-620, PX-621, PX-575, PX-576, PX-577, PX-578, PX-579,  
12 PX-843, PX-844, PX-845, PX-846, PX-847, PX-848, PX-849,  
13 PX-850, PX-851, PX-852, and PX-853.

14 So that was a lot. Am I on the right track with  
15 you?

16 MR. STRETTON: I just wanted to confirm a few  
17 with you, if that's all right.

18 THE CLERK: Yeah.

19 MR. STRETTON: So PX-627.

20 THE CLERK: Okay. I don't think I said -- did I  
21 say 627? I don't have 627.

22 MR. STRETTON: I don't think I heard it, but I  
23 have that on my list.

24 THE CLERK: Okay. We need to confirm that one,  
25 then.

1 MR. STRETTON: And these ones you might have  
2 said and I didn't quite hear it, but PX-325.

3 THE CLERK: No. I have 324.

4 MR. STRETTON: Okay. I have 324 as well. So  
5 let me ask, that one was already admitted, but it was  
6 referenced today.

7 THE CLERK: Yeah. For Mr. Sullivan?

8 MR. STRETTON: For Mr. Sullivan, yes.

9 THE CLERK: Yeah. So let's just put it on there  
10 so we have both.

11 MR. STRETTON: Okay. PX-315.

12 THE CLERK: I don't have that one either.

13 Do you have that one?

14 MS. NGUYEN: I wasn't here even in the room so  
15 I'm going to have to double-check everything.

16 THE CLERK: All right. We're going to need to  
17 double-check that one too because I don't have that one.

18 MR. STRETTON: PX-541.

19 THE CLERK: I have that.

20 MR. STRETTON: Okay. PX-530.

21 THE CLERK: I have that.

22 MS. NGUYEN: I have that too.

23 MR. STRETTON: And then there's just this range  
24 I want to make sure we have. It's PX-531 through 535.

25 THE CLERK: I have 531, and I have 535. I

1 didn't get 532 -- so I just have a dash there. So we can  
2 put those all on there. 532.

3 Okay. The other ranges are good?

4 MR. STRETTON: I believe so, but like I said, it  
5 would be great if we could also confirm.

6 THE CLERK: Yeah. Because like you said, he  
7 said blocks.

8 All right. Mr. Sullivan's cross, I have PX-62,  
9 PX-461, DX-AP.

10 MS. NGUYEN: Uh-huh.

11 THE CLERK: And then we have Joint Exhibit JTX-7  
12 is the video deposition of Corina Mutu. JTX-8 is the  
13 video deposition of Dermot Wall. JTX-9 is the video  
14 deposition of Linda Brennan, and JTX-10 is the video  
15 deposition of Pedro Reyes.

16 MS. NGUYEN: And Norton would like to move its  
17 exhibits into evidence from cross.

18 THE CLERK: From cross?

19 MS. NGUYEN: Yeah.

20 THE COURT: Okay. I can't do that. So the  
21 judge has to do that.

22 MS. NGUYEN: Oh, I thought the procedure was  
23 just to say it, like, here.

24 THE CLERK: We get it --

25 MS. NGUYEN: Oh.

1 THE CLERK: We confirm what we have put on the  
2 record, and the parties actually just have -- if DX-AP is  
3 not admitted as evidence, then they have to move it in as  
4 evidence.

5 MS. NGUYEN: Okay.

6 THE CLERK: I mean, I think -- the way I  
7 understood it was unless they are objected to, that it was  
8 entered.

9 MS. NGUYEN: Okay.

10 THE CLERK: So it's probably already entered  
11 unless there was some type of an objection about it.

12 MS. NGUYEN: Okay. There wasn't that I heard.

13 THE CLERK: Okay. Then it's already admitted.

14 MS. NGUYEN: Okay. Just checking. Well --  
15 yeah, just checking.

16 THE CLERK: We're just here to confirm that what  
17 we put on the record matches what I have on the record and  
18 that we're all in agreement as to what's demonstrative and  
19 what's been entered.

20 MS. NGUYEN: Okay.

21 THE CLERK: So if DX-AP is not objected to in  
22 any way, then it is entered.

23 MS. NGUYEN: Okay. All right. Sounds good.

24 THE CLERK: Does that sound?

25 MS. NGUYEN: Yep.

1 MR. STRETTON: I think it was already brought in  
2 with Stolfo as well so --

3 THE CLERK: Yes.

4 (The trial adjourned at 5:45 p.m.)  
5

6 REPORTER'S CERTIFICATE

7 I, Tracy J. Stroh, OCR, RPR, Notary Public in and for  
8 the Commonwealth of Virginia at large, and whose  
9 commission expires September 30, 2023, Notary Registration  
10 Number 7108255, do hereby certify that the pages contained  
11 herein accurately reflect the stenographic notes taken by  
12 me, to the best of my ability, in the above-styled action.

13 Given under my hand this 21st day of April 2022.

14 /s/  
15 \_\_\_\_\_  
Tracy J. Stroh, RPR

16 /s/  
17 \_\_\_\_\_  
Krista Liscio Harding, RMR

18 /s/  
19 \_\_\_\_\_  
Diane J. Daffron, RPR, CCR  
20  
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22  
23  
24  
25

## I N D E X

## WITNESSES

Examination By:	Page
ERIC COLE	
Redirect - MR. GUZIOR	1684
RYAN SULLIVAN	
Direct - MR. BEENEY	1698
Cross - MR. MORIN	1817
CORINA MUTU	
Video	1854
DERMOT WALL	
Video	1855
LINDA BRENNAN	
Video	1859
PEDRO REYES	
Video	1861